

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

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Abstract

Do people distinguish income from wealth distributions, and are they aware that wealth inequality is much higher than income inequality? In a large scale survey experiment among a representative Dutch population (N=4,359), we study voters' perceptions of income and wealth distributions, and connect their views to administrative data about their own income and wealth. Despite a primer on the definition of income and wealth, respondents underestimate the difference in inequality on the two measures by a factor of 10. Moreover, they use information about the income distribution to make predictions about the wealth distribution and vice versa, even when information about both is provided. An information intervention about actual inequality levels and personal ranks in the income/wealth distribution has an impact on the perceived inequality and perceived fairness, but little effect on policy preferences. We thus document that voters differentiate little between wealth and income distributions, and discuss implications for political debates about inequality and wealth taxation.

JEL classification: D31, D63, H31, P16

Keywords: Inequality, Beliefs, Information provision, Redistribution

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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% to 45% of all income, they possess 45% to 70% of all wealth.¹ The findings have led to heated discussions on whether and how to tax wealth both among academics and policy makers (Piketty, 2014; Mankiw, 2015; Saez and Zucman, 2019; Scheuer and Slemrod, 2021).

It also raises the question how the public perceives income and wealth distributions, whether they are aware of the inequality gap between these domains, and how this affects their policy views. The literature on public perceptions of inequality and policy preferences has not answered these questions, as it has focused almost exclusively on perceptions of *income* distributions (Mengel and Weidenholzer, 2023). Furthermore, we know little about how people evaluate wealth inequalities normatively. There is reason to think that people may be more accepting of income inequality compared to wealth inequality: While income may be seen as the (deserved) reward of effort, wealth derives also from other, (unmerited) sources like inheritance. This may shape their preferences over policies of wealth taxation.

In this study, we explicitly contrast 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 these variables on citizens' inequality acceptance and policy preferences related income and wealth taxation. To do so, we rely on a survey experiment where we give a selection of participants information about the income and/or wealth distribution, and about their own position within these 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 ($N = 4,359$), using the online Longitudinal Internet studies for the Social Sciences panel (LISS). The LISS panel is linked to registry data provided by the Centraal Bureau voor de Statistiek (CBS), providing us with high-quality background information on the *actual* wealth and income of participants. 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 distribution.

The Netherlands is well suited for our exercise. The top 10% of the highest earners only earn 26% of the total income, a relatively low inequality within the OECD. By contrast, the OECD

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

ranks the Netherlands as the second most unequal country in terms of wealth after the U.S., with the top 10% of the wealthiest individuals owning 62% of the total wealth.²

Our participants think wealth inequality – as measured by the share of wealth owned by the richest 10% – is 3.4 percentage points larger than income inequality. While this difference is statistically significant, it underestimates the actual difference by a factor of more than 10 (26 vs. 62 percentage), as a large majority of people overestimate income inequality and underestimate wealth inequality. This pattern barely budges when we saliently contrast income and wealth inequality by asking people about both. Our treatments do indeed have an effect on beliefs, as providing information about income inequality leads to a decrease in subjectively perceived income 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 meaningful effects on policy views. Providing information about income also moves perceptions about the wealth distribution and vice versa, further underscoring that participants view these two measures as highly related.

The blurry distinction between income and wealth extends to estimates of their own ranking in the two distributions, which we compare to their actual income and wealth levels in administrative data. On average, our sample underestimates both their own position in the income and wealth distribution, in line with previous literature on income (Hvidberg et al., 2020). Misperceptions correlate on an individual level and are larger for wealth than for income. For both perceptions of relative income and wealth, we observe a clear ‘center-bias’, meaning that people tend to think their income and wealth is more representative of that of the 50th percentile than it 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 the preferences for redistribution, in line with many earlier information provision experiments (Haaland et al., 2023).

Taken together, our data shows that people have little idea about the difference between income and wealth inequality. This is relevant to the academic literature on public economics, which makes a prominent distinction between income and wealth. For instance, while most economic models stress a need for income taxation, wealth taxation is theoretically more debated (Straub and Werning, 2020), despite the larger inequality on this economic metric. The findings also matter to the policy debate on inequality: the lack of awareness of wealth inequality may help explain the declining popularity of wealth taxes over the last few decades in OECD countries (Andre, 2018;

²See Balestra and Tonkin (2018). This number is contested, as it leaves out wealth in pension funds, which reflects an unresolved debate in the wealth measurement literature. If pensions are included, the share of the top 10% drops to 48%, which is below average within the OECD, but still higher than income inequality. We leverage this fact in our survey by giving information related to both inequalities.

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 contrast perceptions of income and wealth. There is a large literature on perceptions of income inequality, which measures people’s perceptions of and attitude towards such inequality (Cruces et al., 2013; Kuziemko et al., 2015; Karadja et al., 2017; Hvidberg et al., 2020; Fehr et al., 2022). However, a review by Mengel and Weidenholzer (2023) remarks that wealth inequality has received scant attention. An exception is Norton and Ariely (2011) who study people’s perceptions about wealth inequality and contrast those beliefs with people’s ideal wealth distribution. 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 prefer higher taxes on wealth when it is inherited, but they do not study perceptions about the income and wealth distributions.

2 Data

2.1 Data

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 distribution.

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. Given the pre-registered inclusion criteria of i) having completed the online experiment, and ii) granted permission to link their survey responses to the registry data, we are left with a final sample of 4,359 respondents.

2.2 Survey Design

Our survey experiment is divided into four main parts. The first part serves to clearly define income and wealth to all participants, and thus minimizes the likelihood that results are driven by a general confusion about the terms. We provide the definitions by showing all participants informative videos that include illustrations, audio, and subtitles.

The videos all start by an explanation of our definitions of income and wealth. Although all conditions include a definition of wealth, the definitions of wealth vary. For participants assigned to the Pension treatment (P), the wealth definition included pension, and for all other conditions pensions are excluded. We include information with and without pensions to reflect debates in the literature on wealth measurements.³ Including both information treatments also allows us to compare the effects of a change in wealth inequality. Other than the inclusion/exclusion of pensions, the definitions are identical.

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 identify how these perceptions in turn affect people’s meritocratic beliefs and preferences for redistribution, we randomize participants into different inequality information treatments. The treatments vary with respect to whether participants are asked and receive information about the actual level of income inequality (I), wealth inequality (W), both income *and* wealth inequality (B), or a control condition where they receive no information (0). The treatments are implemented by a combination of informative videos and interactive questions.

For participants in the No information condition (0), the videos only contain the definitions of income and wealth. For participants assigned to one of the inequality information treatments (I, W, or B), the video continues by introducing a measure of inequality. Depending on the assigned treatment, the measure of inequality introduced is the income and/or wealth share of the top 10% highest earners/wealthiest in the Netherlands. The videos only contain an explanation and illustration of the inequality measure, but not the answer.

The final segment of the inequality treatments involves interactive questions and information provision. Participants are first asked to provide an answer to the inequality measure specific to their treatment condition. After stating their answer, participants are presented with the factual measure of inequality, again, corresponding to the specific treatment condition they have been assigned. The inequality measures are 26% for income, 48% for wealth (including pensions), and

³See Appendix C 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). Given that The Netherlands has private pensions that are predominantly owned by the middle class, including such funds sharply reduces the degree of wealth inequality.

62% for wealth (excluding pensions).⁴ All inequality measures were depicted using an illustration similar to the one featured in the video: displaying a pie chart indicating the portion attributed to the top 10%. The information provision on actual levels of inequality is interactive. Depending on their previously stated answer, the text adapts to state whether the actual level of inequality (income and/or wealth) is lower/higher or as the participant perceived it to be.

The third part of our survey experiment serves to document the accuracy of individuals' perceptions of their placement within the income and wealth distributions. Our rank treatment (R) provides participants with feedback about their own rank in the income and/or wealth distribution. Independent of treatment condition, all participants are asked to place themselves in the income and wealth distributions. Having done so, participants in the rank treatments were provided with feedback on what level of income and/or wealth corresponds to the previously stated percentile. Within the Inequality treatments, we randomize a subset of participants to receive feedback on their rank within the respective distribution (income, wealth, or both), with the subset from the No information treatment also receiving feedback on both ranks.

Lastly, in the fourth part of the survey all participants answered a list of questions eliciting their beliefs about causes of inequality, meritocratic beliefs, perceptions of inequality, fiscal policy preferences, and donation behavior. Taken together, our treatments lead to a 4×3 between-subject design with the following 12 conditions of identical size: 0C; 0P; 0R; IC; IP; IR; WC; WP; WR; BC; BP; BR, where the first placeholder refers to the inequality treatment and the second placeholder indicates whether the respondent received the Pension, Rank, or Control (i.e., no Pension and no Rank) condition. For a full overview of the survey questions see Appendix C and Appendix B for an overview of the survey structure and randomization.

3 Results

We start our analysis with an overview of the perceptions of income and wealth inequality, and the information treatments on these measures. We then move to an overview of perceptions of personal income and wealth rank, and the associated information treatments.

⁴Income inequality is computed based on post-tax and transfer income reported in Bruil et al. (2022). These data closely match those from WID.world, Dutch Bureau of Statistics (CBS) as well as our own computations from the CBS data. The data for wealth inequality with and without pensions are based on data from the CBS, found here <https://www.cbs.nl/nl-nl/longread/statistische-trends/2020/pensioenvermogen-en-vermogensongelijkheid?onpage=true>, last accessed February 28, 2024.

3.1 Perceptions of Income and Wealth Inequality

Figure 1 shows the perceived level of 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 percentage points, a difference which is statistically significant ($t=-16.68$, $p<0.001$). Second, respondents underestimate the difference between income and wealth inequality by more than a factor 10, as the true difference is 36 percentage points (using wealth without pensions as baseline). In particular, people largely overestimate the level of income inequality, and underestimate the level of wealth inequality.⁵

In the appendix, we show a series of additional analyses. First, we investigate what happens if we make the difference between income and wealth more salient. While all respondents see definitions of both income wealth in 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 percentage points, a change that is fully driven by higher perceptions about wealth inequality, but remains much smaller than the actual difference. When we include pension in the definition of wealth, we do not see any difference in perceived wealth inequality.

3.2 Information about Inequality

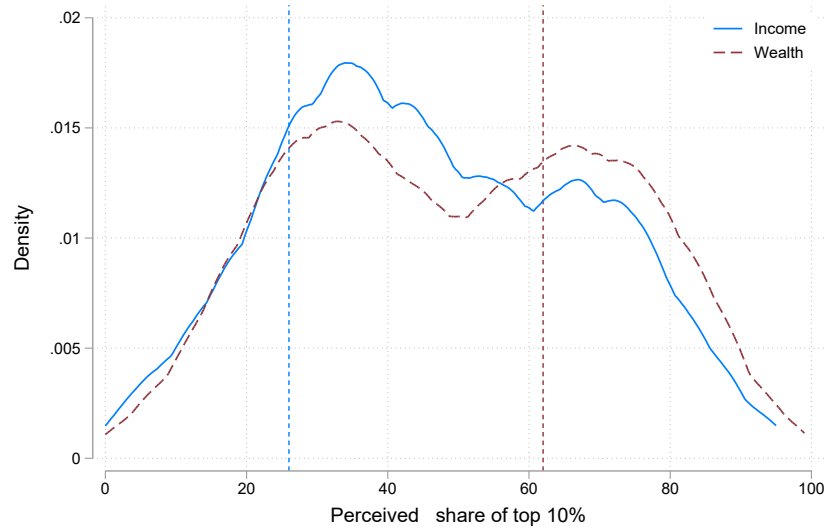
Figure 2 shows the impact of our various inequality information treatments on the subjectively perceived inequality of the Wealth and Income distributions. This manipulation check confirms that our treatments did indeed affect subjectively perceived inequality.

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 overestimated wealth inequality. When we include pensions in the definition of wealth, thus decreasing the level of inequality from 62% to 48%, the point estimates are reduced and become zero for income inequality even slightly negative for wealth.

Next we investigate the effect of information on policy preferences. Table I shows OLS regressions of the information treatments on beliefs that inequality is due to merit or luck (column 1),

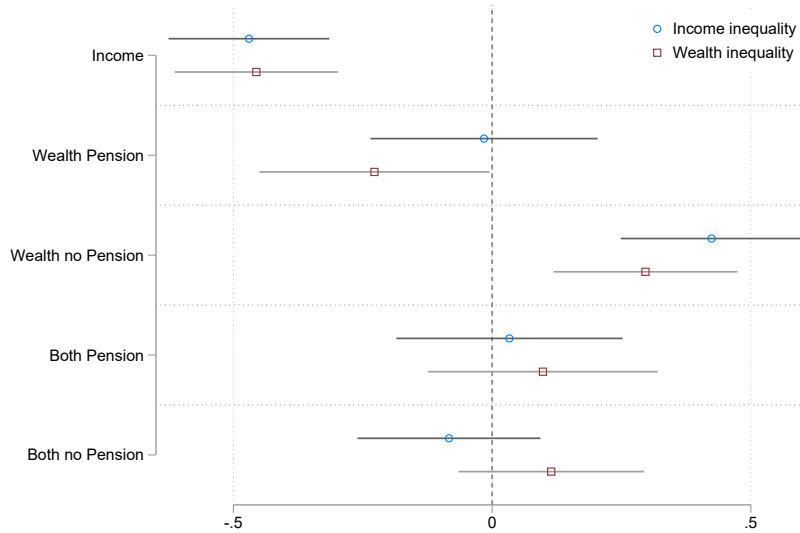
⁵For a full overview of summary statistics about the perceptions of wealth and income inequality for the different inequality treatments, see Table II in Appendix A.

Figure 1: Perceived level of income and wealth inequality



Note: The figure shows perceived levels of income (blue) and wealth inequality (red) 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 used excludes participants in the “Both” treatment.

Figure 2: Impact of information on perceived inequality



Note: The figure shows the estimated average effects of information provision on perceived income inequality (blue) and wealth inequality (maroon), where the No information condition (0) 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% confident intervals. In the No information condition, the average perceived level of income and wealth inequality are 6.4 and 6.8 respectively.

ratings of fairness (column 2) and an index for the desired progressivity of taxes.⁶ 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 NP) make people 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 P) or a mix of high and low levels (Both).

⁶The progressivity index measures the preferred level of progressivity across the income tax, the wealth tax, and the inheritance tax based on answers to question Q8a–Q10c (see Appendix C). For each of these three taxes, progressivity is measured as the ratio of the top over the bottom tax rate chosen by respondents. The index is the sum of normalized ratios divided by the number of policies.

Table I: Estimated treatment effects of 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 information treatments, with the no information condition used as base. Robust standard errors are reported in parentheses. 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). Estimates for the progressivity index reported in column (3) is the sum of normalized ratios divided by the number of policies (3), where the ratios are calculated as the top over the bottom tax rate chosen by respondents for the income tax, the wealth tax, and the inheritance tax. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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), 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).⁷

We replicate the middle-income bias in our data for both income and wealth. 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. Again, we find evidence for a cross-use of information, as people with higher wealth are more likely to overestimate their income and vice versa.⁸ 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. We also provide more information on the distribution of perception by wealth/income decile.

As a gauge of the strength of the compression of the distribution, we find that among the poorest decile, many of whom have no, or even negative wealth, 34.1% rate themselves among the 50% richest people, while 29.4% for wealth, of the richest 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, the idea that people are unsure about the answer to a relatively complex question (Enke and Graeber, 2023).

3.4 Information about Income and Wealth Rankings

A second information treatment dimension was to provide participants with feedback about their actual income and wealth rank. We will analyze this further in future versions of the paper.

For now, we find that feedback was effective at changing perceived ranks: When a respondent overestimated their rank by 10 percentiles, giving the rank feedback leads to an updated guess that was 2.5 percentiles lower for both income and wealth, with no statistically significant difference between the two. Like for the inequality information, we find evidence for cross-updating between the two types of information, although the size of the cross-update is smaller than the direct update in the case of wealth. We find little evidence of an effect on policy preferences.

4 Conclusion

We compare perceptions of the Dutch population of income and wealth inequality. While the two inequalities differ strikingly in size, respondents do not perceive much difference between them. They overestimate income inequality and underestimate wealth inequality. We also observe a strong compression for perceived place in the wealth (and income) distribution. Supplying people

⁷Out of the 4501 who answered the survey, we successfully matched 3987 (i.e. attrition of 515 participants).

⁸The effects of actual income and wealth percentiles on perceived income percentile are 0.282 (t=24.14) and 0.065 (t=5.59) respectively. The effects of actual income and wealth percentiles on perceived wealth percentile are 0.169 (t=13.80) and 0.195 (t=16.03) respectively.

with information about inequality has an impact on perceived fairness of the distribution, but little on policy preferences, as is often the case in survey experiments.

Our results therefore support the conclusion that respondents have little idea about the difference between income and wealth inequality. This can not be due to a misunderstanding of the difference between income and wealth, which was explained with a short video. Rather, our interpretation is that voters are fundamentally unsure about the difference in actual inequality levels. This interpretation is bolstered by the finding that they use information about one type of inequality to update their beliefs about the other type, even when information about both types is provided.

What do these conclusions imply for the political debate on wealth taxation on “the rich” taking place in many Western countries (Scheuer and Slemrod, 2020, 2021)? We find little evidence that information about inequalities induce a shift in policy preferences. However, this is common in survey experiments, and may be due to the somewhat minimalist nature of information interventions (Haaland et al., 2023). It will therefore be important to follow up our initial investigation with more extensive forms of information provision. Second, we show that politicians who want to make the case for wealth taxation will have to overcome substantial hurdles. In particular, voters appear to base their perceptions of inequalities in part on the *income* distribution, leading to a stark underestimate of wealth inequality. Moreover, even the poor consider themselves to be of average wealth, and may therefore not see a personal gain from such type of taxation. These last findings may also help explain the lack of general enthusiasm for wealth taxes in Western countries.

We want to highlight the public’s perception of the wealth distribution as a rich topic for further research. While inequality research has focused on income, wealth features saliently in popular culture, which often spotlights the opulent lifestyles of “billionaires” or the “superrich”. Depending on who is watching, such attention may trigger either admiration and attempts at emulation, as well as disgust and calls for redistribution. Understanding such responses may yield a better understanding of the public’s attitudes towards economic policy.

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

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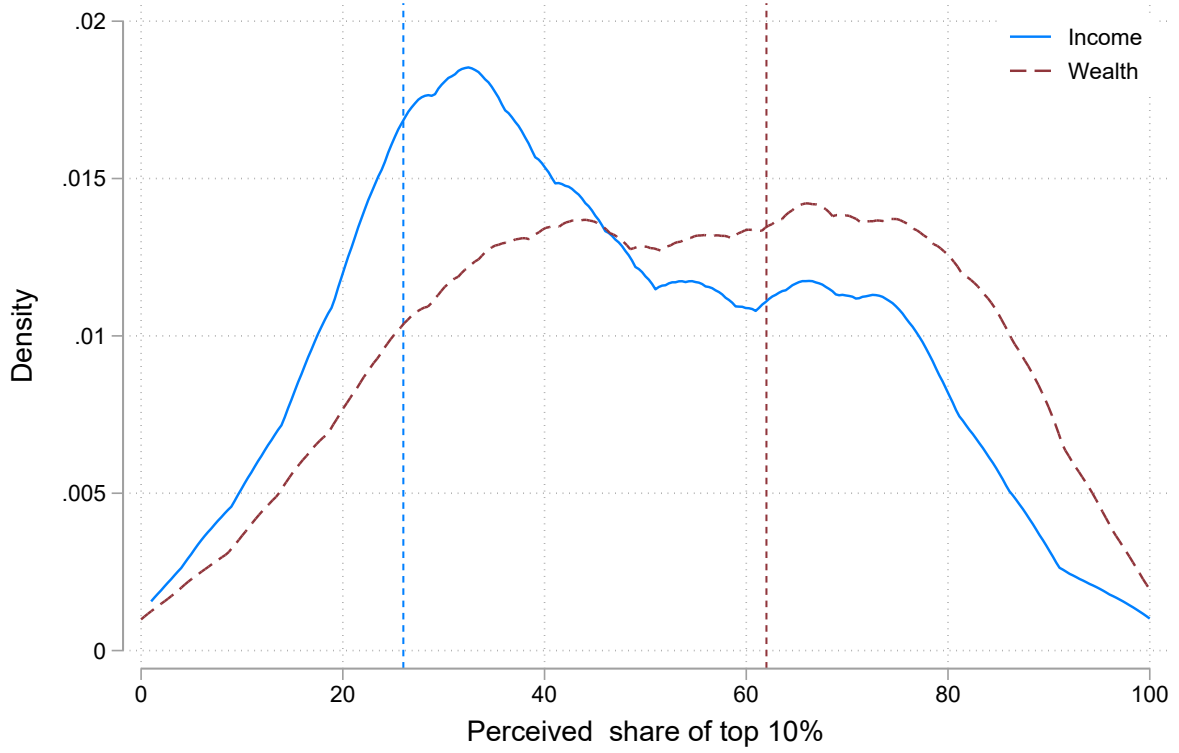
A - Additional Tables and Figures

B - Survey structure and randomization

C - Survey

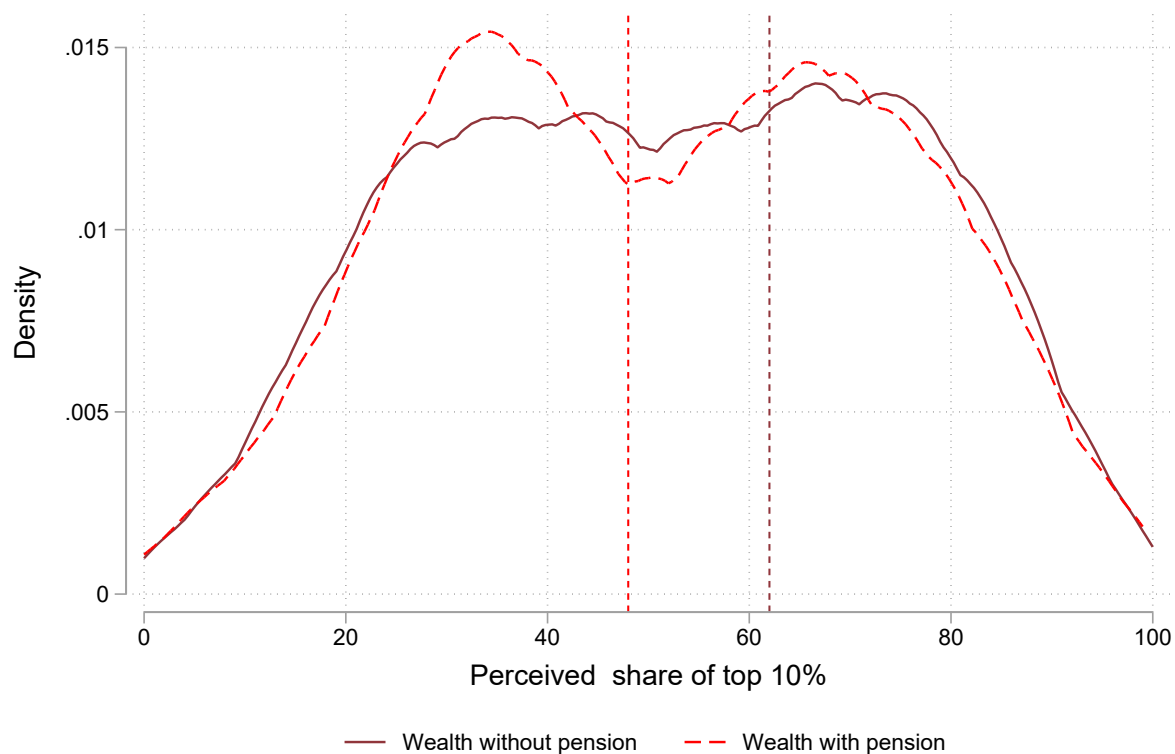
A Additional Tables and Figures

Figure 3: Perceived level of income and wealth inequality in the “Both” treatment



Note: The figure shows perceived levels of income (blue) and wealth inequality (red) 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 used is restricted to participants in the “Both” treatment.

Figure 4: 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 marks the actual share of the top 10%: 48% if including pensions, and 62% when excluding pensions. **Sample restrictions***

Table II: Summary statistics for perceived inequality measure by inequality treatment

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

Note: The table reports summary statistics for the inequality measure reported in the first column, for each of the information treatments: Income treatment (column 1), Wealth treatment (column 2) Both treatment (columns3–6). The inequality measure is the perceived income/wealth share of the top 10% in the Netherlands.

B Survey structure and randomization

T1: Income/Wealth inequality	I	I	I	W	W	W	B	B	B	C	C	C
T2: Pension or Rank treatment	R	0	P	R	0	P	R	0	P	R	0	P
Info1a: definition without pension	-	-	-	-	-	-	-	-	-	Yes	Yes	-
Info1b: definition with pension	-	-	-	-	-	-	-	-	-	-	-	Yes
Info1c: definition without pension + income inequality	Yes	Yes	-	-	-	-	-	-	-	-	-	-
Info1d: definition with pension + income inequality	-	-	Yes	-	-	-	-	-	-	-	-	-
Info1e: definition without pension + wealth inequality	-	-	-	Yes	Yes	-	-	-	-	-	-	-
Info1f: definition with pension + wealth inequality	-	-	-	-	-	Yes	-	-	-	-	-	-
Info1g: definition without pension + income and wealth inequality	-	-	-	-	-	-	Yes	Yes	-	-	-	-
Info1h: definition with pension + income and wealth inequality	-	-	-	-	-	-	-	-	Yes	-	-	-
Q1a: income share 10%	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	-	-	-
Q1b: wealth share 10%	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
Info2a: info 10% income comparison	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
Info2b: info 10% wealth comparison	-	-	-	Yes	Yes	-	-	-	-	-	-	-
Info2c: info 10% wealth with pension comparison	-	-	-	-	-	Yes	-	-	-	-	-	-
Info2d: info 10% income/wealth comparison	-	-	-	-	-	-	Yes	Yes	-	-	-	-
Info2e: info 10% income/wealth with pension comparison	-	-	-	-	-	-	-	-	Yes	-	-	-
Q2a: subjective income inequality	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Q2b: subjective wealth inequality	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RE-Q2a: subjective income inequality	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-
RE-Q2b: subjective wealth inequality	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
Q3a: rank income	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q3b: rank wealth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q4a: feedback and update rank income	Yes	-	-	-	-	-	Yes	-	-	Yes	-	-
Q4b: feedback and update rank wealth	-	-	-	Yes	-	-	Yes	-	-	Yes	-	-
Q5: open question on causes of inequality	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q6: effort or luck (0-10)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7a: inequalities too large	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7b: inequalities unfair	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7c: role of the government	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7d: effectiveness redistribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7e: tax progressivity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q7f: equity-efficiency trade-off	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q8: income tax policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q9: wealth tax policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q10: inheritance tax policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q11: tax on property policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q12: subsidy on interests policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q13: incentivized donation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

C 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%.

Q8 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.

D 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 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 [[represents 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 [represents 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 [represents 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.