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PREFERENCES FOR INCOME REDISTRIBUTION: A NEW SURVEY ITEM AND EXPERIMENTAL EVIDENCE

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Preferences for income redistribution: a new survey item and experimental evidence*

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Abstract

This paper introduces a new survey item to measure preferences for income redistribution. Respondents construct their preferred distribution of after-tax income by changing the tax rates of the bottom four income quintiles. Taxes for the top income quintile update automatically to keep government revenues fixed and take into account the costs of redistribution. Dutch data indicate that around 50-60% prefer more equality. Only 5% opt for more inequality, but not beyond a flat-tax. We investigate the formation of redistributive preferences. Information about efficiency costs of taxation and the use of social insurance among low incomes shifts preferences towards greater inequality.

Key words: income redistribution, measurement, efficiency

JEL-codes: D31, D72, H23, H24

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1 Introduction

Many governments in Western countries face a long-run fiscal imbalance, due to long term trends such as aging and rising health care costs, but also due to the current COVID-19 pandemic. The distributional effects of restoring fiscal sustainability will largely depend on redistributive preferences of the voting population, at least in the long run (Corneo, 2001; Corneo and Neher, 2015). Since democracies tie the extent of redistribution to the preferences of the voting population, economists have long paid attention to individuals' preferences for income inequality and redistribution (see Alesina and Giuliano, 2011, for a review). Recent trends in inequality, intergenerational mobility, and migration have reinvigorated this research (e.g. Kuziemko et al., 2015; Alesina et al., 2018b, 2019, 2020; Fisman et al., 2021).

Existing work typically measures those preferences either qualitatively, e.g. by means of a single Likert scale, or quantitatively through an experiment in which participants divide payoffs. This paper proposes a new survey item to measure preferences for government redistribution. Respondents construct their preferred distribution of after-tax income by adjusting the tax rates for the lower four income quintiles. Taxes of the highest quintile are updated automatically to keep total revenues constant. The survey item incorporates behavioral responses to taxation, e.g. labor supply adjustments and tax evasion. The preferred distributions can be used to calculate measures of inequality, for example Gini coefficients and income ratios, and other quantities such as the total amount redistributed relative to the status quo. We field the new redistribution question in a large, representative household panel drawn from the Dutch population and use a randomized information experiment to measure the causal effect of two types of information on preferences.

The contribution of this paper to the literature is twofold. Firstly, this paper proposes a new survey item to measure preferences for income redistribution. The resulting measures have clear quantitative interpretations, are comparable between individuals, and focus on redistribution without simultaneously changing social insurance and the size of the government.

All three aspects are advantages over more qualitative measures, such as scales indicating agreement with statements like 'income differences should be smaller/current level/larger' or 'the government should do more to help poor people'. Scales that express preferences relative to the current distribution may be misleading if survey respondents disagree on the current situation or by how much differences should be 'smaller'. Furthermore, by using taxation as the lever by which to manipulate the income distribution, the survey item explicitly connects instruments and outcomes. Previous studies often do not mention how redistribution would be achieved (e.g. Fisman et al., 2021) and many individuals do not make the connection between inequality concerns and government policy intended to reduce inequality (Kuziemko et al., 2015). The new survey item focuses on taxation, since income tax is primarily redistributive. It highlights the inherent tradeoffs of redistribution and disentangles redistribution from the scope of government by keeping the size of the government budget fixed (in contrast to Singhal, 2008). Furthermore, existing estimates of the tax elasticity of taxable income allow for the incorporation of realistic adaptations to tax changes (Saez et al., 2012, provide a review of this literature). The survey item is interactive and updates numerical and graphical representations of the income distribution after each change to tax rates, which improves engagement and data quality (Kuziemko et al., 2015). Finally, respondents construct their preferred distribution of income in the population at large, rather than divide limited payoffs among fellow participants in an experiment. While such experimental measures predict real world behavior such as career choices and voting (Fisman et al., 2015b, 2017), our approach ensures external validity for the population-wide distribution of income (which is highly relevant for policy).

The second contribution consists of two randomized information treatments that shed new light on the formation of preferences for redistribution. The first treatment focuses on the classical tradeoff between efficiency and equity. It exploits the fact that the question accounts for behavioral responses to taxes and provides respondents with accurate information on the

inefficiencies introduced by their proposed tax scheme. The second treatment shifts attention to transfers and adds an overview of the distribution of the most important income sources by income quintile. Respondents are alerted that transfers play a relatively large role in the bottom income bracket. In addition to these information treatments, an independent randomization allocates respondents to tax elasticities of income equal to 0.25 or 0.35. The former is the best, mid-range estimate currently available (Saez et al., 2012) and the latter allows us to assess robustness of results to reasonable variation in this important parameter.

The results show that the Dutch are roughly evenly split between the current distribution and a preference for a more equal distribution of after-tax income. While 5% would prefer a *less* equal income distribution, this never goes beyond a flat-tax. The income source treatment makes respondents 5 percentage points (pp) less likely to construct a more equal distribution and more likely to stick to the current distribution, on a baseline of 50%. This effect is strongest for the taxes imposed on the lowest income quintile, which relies most heavily on transfers. The size of deviations from the current situation among those who do change the distribution is not affected. Explicitly informing people about deadweight losses does not affect the fraction of individuals that implement changes, but it does lead to 10% smaller deviations in terms of euros redistributed and hence to more unequal preferred distributions. The effects of the information treatments are substantial: they amount to one quarter to one third of the difference between left and right-oriented respondents.

The rest of the paper is organized as follows. Section 2 describes the new survey item and information treatments in detail, after which section 3 provides descriptive statistics. The main results regarding information treatments are presented in section 4. Finally, section 5 concludes.

2 Measuring preferences for redistribution

Many different approaches have been used to elicit preferences for redistribution. Appendix A provides an overview of the methods used in the last twenty years. The present paper relates to three broad shifts in terms of measurement, study design and samples.

The first is a shift in measurement from a single qualitative question on an ordinal scale to complex measures based on surveys or experiments (see e.g. Alesina and Giuliano, 2011, for examples based on Likert scales and Charité et al., 2015; Fisman et al., 2015a,b; Karadja et al., 2017; Alesina et al., 2018a,b, 2020; Almås et al., 2020; Fisman et al., 2021, for other approaches). One such recent approach combines different questions, both qualitative and quantitative, into an index (e.g. Karadja et al., 2017; Alesina et al., 2018a,b). Aggregation of multiple items into a single measure allows one to capture attitudes to different aspects of inequality and the policies intended to address it. Moreover, it may reduce the influence of measurement error. However, there is a cost in terms of interpretability, due to the combination of disparate qualitative and quantitative items regarding policies that range from more purely redistributive (taxes) to social insurance (welfare).

In closely related research, Fisman et al. (2021) elicit distributional preferences by means of pairwise comparisons between hypothetical income distributions that are anchored on the current distribution in the U.S. Their research identifies the features of income distributions that are most relevant to distributional preferences. A key aspect of their approach is that it asks respondents to imagine themselves at different ranks of the income distribution. The new survey item proposed in this paper, on the other hand, aims to measure public opinion on income redistribution given people's own income position, taking into account the costs of redistribution. The setting closely reflects the real world with a focus on income taxation to aid interpretability and enhance policy relevance. As Karadja et al. (2017) shows that misperception of the current income distribution influences preferences for redistribution, an

important feature of our new survey item is that it presents the current income distribution.[1] Also, our information experiment shows that knowledge about the amount of redistribution influences redistributive demand.

The second shift has been in study design, where large-scale survey experiments have gained primacy over observational studies of the correlates of attitudes and small-scale lab experiments. In particular, random assignment of different types of information has been used to establish the causal impact of reference points and views on immigration and inter-generational mobility on support for redistribution (Charité et al., 2015; Alesina et al., 2018a,b). Survey experiments are attractive, because they combine the internal validity of an experiment with the external validity of a large and demographically diverse sample. The latter is particularly important for views on inequality, because previous research indicates that results are sensitive to the subject pool investigated (Fehr et al., 2006). The present study includes randomized information treatments in a nationally representative sample, ensuring both types of validity.

The third and final shift has been in the types of samples analyzed. Here the focus has broadened from scientific panels (for observational studies) and small groups of students (for lab experiments) to commercial platforms, especially Mechanical Turk. Such platforms let task owners pay individuals to carry out jobs, which include responding to surveys or dividing payoffs between other workers (e.g. Charité et al., 2015; Cohn et al., 2019; Almås et al., 2020; Fisman et al., 2021). While they allow for quick data collection and thus afford flexibility to run follow-up experiments, participation is based on self-selection. We analyze the LISS panel, which is based on a true probability sample drawn from the Dutch population registry by Statistics Netherlands. Hence, self-selection does not play a role.

[1]Norton and Ariely (2011) show that Americans underestimate wealth inequality even as they believe there is too much of it.

2.1 The new survey item

The new survey item to measure preferences for redistribution was designed to elicit reasonable preferences from respondents under realistic constraints, rather than ask them to indicate a hypothetical income distribution that could never be realized. In order to achieve this, it starts from the current distribution and presents tax rates and after-tax income in one single frame. Respondents are asked to choose the tax rates for the lower four income quintiles from drop-down menus. The tax levied on the highest income quintile adjusts automatically after each change to keep total tax revenue constant. Moreover, the distribution of after-tax income changes in response to each tax reform. These changes to tax rates and incomes reflect two mechanisms. The first is a direct effect: if one lowers the taxes on the first quintile, for example, this increases its after-tax income. The price is paid by the top quintile, for which taxes increase and after-tax income drops. The second effect is that of behavioral responses, by which workers in the first quintile will choose to increase pre-tax income and those in the top quintile reduce it in response to the changes in taxes. The increase in pre-tax income for the first quintile mitigates the increase in the top tax rate required to keep tax revenue constant. However, the negative effect for the top quintile amplifies the increase in taxes required and creates a deadweight loss of taxation. The adjustments of gross income in response to changing tax rates may reflect different types of behavior, such as labor supply and tax evasion.

The exact wording of the question for the baseline treatment is as follows:[2]

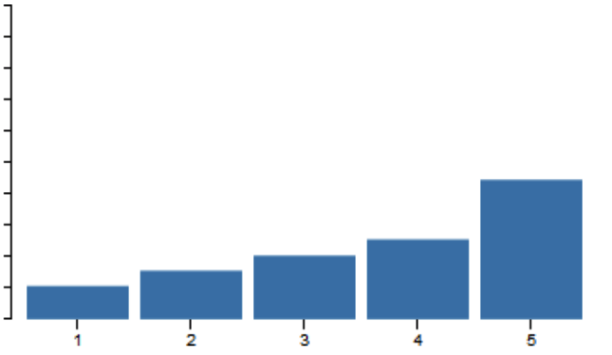
> ***Redistribution***
> *Finally, we would like to ask you what you think the distribution of after-tax income in the Netherlands should be.*
>
> *The figures below show the income distribution in the Netherlands. Everybody is lined up from poor to rich. Group 1 is the group of people with the lowest incomes, group 5 is the group of people with the highest incomes.*

[2]The original text in Dutch is included in Appendix B and Appendix C describes the algorithm through which taxes and incomes are updated dynamically.

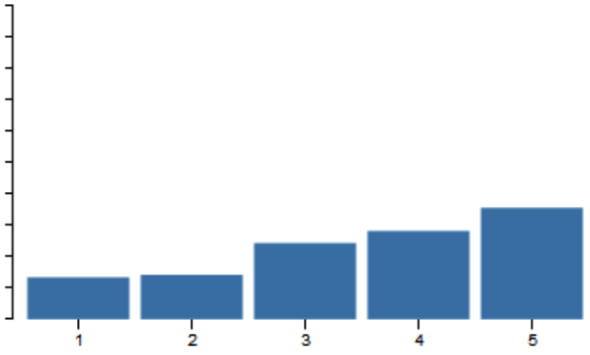
In the figure you see that someone in the poorest group has an average after-tax income of 1059 euros per person per month, while those in the richest group on average have an after-tax income of 4449 euros per person per month (based on a household that consists of a single person). People in group 1 pay on average 25% of their gross income in taxes, the corresponding tax rate for group 5 is 41%.

The left figure is there to provide information. In the figure on the right you can indicate how you want income to be distributed.

This can be done as follows. You can increase or decrease the taxes of the first four income groups. Your choices will sometimes be limited, because people in the lower income groups cannot have a higher income than those in higher income groups. The taxes of the richest group adjust automatically, so that all five groups together pay as much tax as they currently do. If you want you can go back to the initial situation by refreshing/renewing this page.



Income group	1	2	3	4	5
After-tax income (monthly)	1059	1549	2029	2545	4449
Tax rate	25%	30%	35%	40%	41%



Income group	1	2	3	4	5
After-tax income (monthly)	1335	1413	2430	2814	3555
Tax rate	10%	35%	25%	35%	51%

Initially, both figures show the actual state of affairs in 2018 and the figure on the right is updated after every change to taxes. By manipulating incomes through taxes respondents pull meaningful levers, while keeping track of the consequences in terms of monetary amounts that we expect they find easier to comprehend than tax rates alone. The question presents bar graphs, because previous research shows that laypeople find them easy to understand (Fisman et al., 2021). Moreover, the question enforces revenue neutrality and a sensible ordering of income quintiles by dynamically adjusting the content of drop-down menus based on selected

tax rates. The fact that this happens in drop-down menus means that it is hidden from the respondent, which reduces the burden of response. Tax rates of income groups 1-4 can be set in increments of 5 percentage points. The baseline survey only mentions the average income and tax rate by income quintile, focusing on *vertical* redistribution between rich and poor rather than *horizontal* redistribution between groups defined on another characteristic (Wagstaff et al., 1999).

The information on actual tax rates and incomes was obtained from Statistics Netherlands. Reported incomes include all components that are subject to income tax, e.g. earnings, pensions and government transfers. Income derived from wealth, such as capital gains, is not subject to income tax and thus not included in the definition. The question does not specify whether the newly proposed tax schedule is permanent or temporary. However, the Dutch system of income taxation is rather stable: the 2018 tax system had been in place since 2001. Hence, most respondents probably interpret the change as permanent.

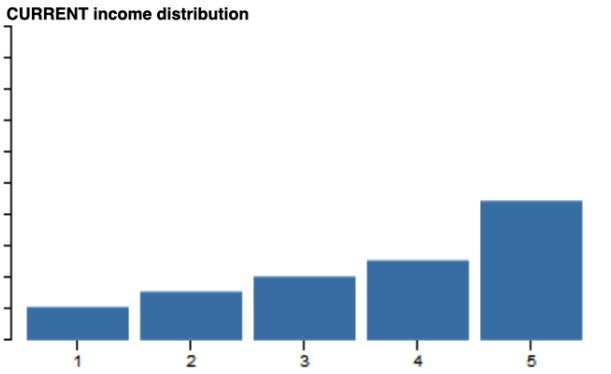
Behavioral responses are implemented after each change to tax rates. Respondents are randomly assigned to elasticities of 0.25 or 0.35. 0.25 reflects the current consensus on the sensitivity of before-tax incomes to taxes (Saez et al., 2012; Mastrogiacomo et al., 2017). Note that we underestimate the true deadweight loss since we are using average tax rates per income quintile instead of marginal tax rates (to keep the question simple). Therefore, we assign half of the respondents a higher elasticity of 0.35 and we investigate the sensitivity of the results.

2.2 Information treatments

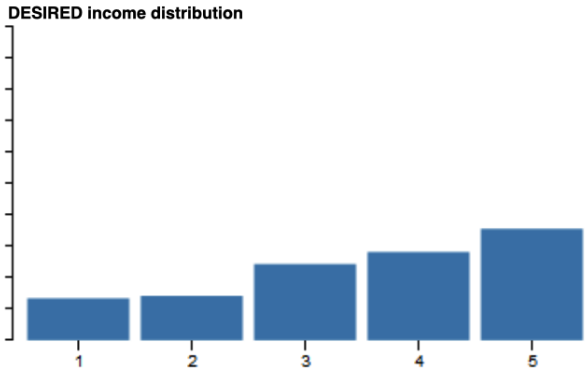
Respondents are randomly assigned to one of two information treatments. In addition to the baseline described above, in which respondents are only informed about the current income distribution, one third of the respondents received information about the *costs of*

redistribution. Another third of respondents received information about the *most important income sources* of each income quintile.

For the costs of redistribution, respondents receive additional information on exactly how much they redistribute relative to the current situation. Moreover, they are informed about the costs per euro redistributed. The question explains this in layman's terms (emphasis in original):



Income group	1	2	3	4	5
After-tax income (monthly)	1059	1549	2029	2545	4449
Tax rate	25%	30%	35%	40%	41%



Income group	1	2	3	4	5
After-tax income (monthly)	1335	1413	2430	2814	3555
Tax rate	10%	35%	25%	35%	51%

According to this choice:

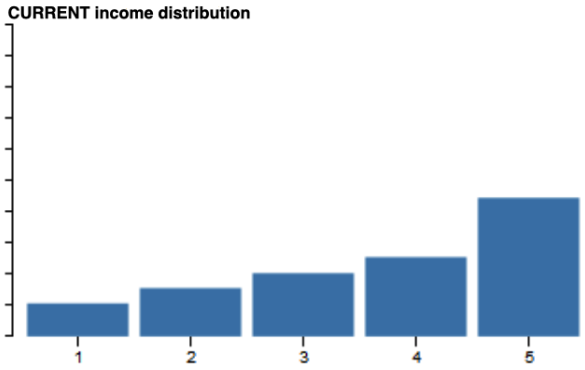
- *people in income groups [1, 3 and 4] would pay on average [246] euros* ***less in taxes*** *per person (if they would not change how much they work)*
- *people in income groups [2 and 5] would pay on average [433] euros* ***more in taxes*** *per person (if they would not change how much they work)*

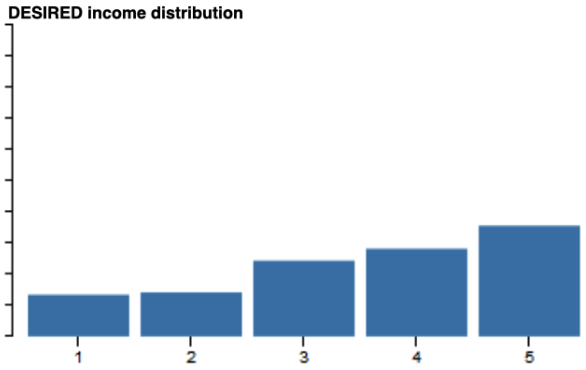
For each additional euro for the people in groups [1, 3 and 4], the average taxes in groups [2 and 5] increase by [1.17] euros per person. Hence, for each euro that is redistributed ***[17 cent is lost]*** *in groups [2 and 5]. This is due to the fact that people in groups [2 and 5] will work less when taxes increase.*

Note: the numbers in the figure correspond to the after-tax income that ***does*** *take into account changes in how much people work. Therefore, the numbers in the figure are not exactly equal to those in the bullets.*

All numbers in square brackets are updated dynamically as respondents change tax rates, according to the algorithm described in Appendix C. The average cost per euro of redistribution across all income distributions available to respondents is 1.25 euros for the elasticity of 0.25 and 1.38 euros for the elasticity of 0.35. While the vast majority of possible distributions result in larger deadweight losses than the current distribution, with costs up to around 2.15 euros per euro redistributed, respondents can also opt for alternatives that *decrease* the size of the deadweight loss. For both elasticities the minimal cost of redistribution is 0.93 euro per euro redistributed, which can be achieved by choosing a flat tax that minimizes the maximum tax rate (e.g. by setting tax rates equal to 30%; 30%; 35%; 40%; 40%). If respondents try such distribution, they are informed that "7 cent is gained" for each euro redistributed. We regard the ability to communicate efficiency costs of taxation in a straightforward way as an important advantage of the survey item. The salience of the costs of redistribution may reduce the willingness to redistribute.

The second information treatment concerns the sources from which people in different income quintiles draw their income. This treatment extends the table that refers to the current distribution, adding the primary income source for individuals in the five income quintiles:





Income group	1	2	3	4	5
After-tax income (monthly)	1059	1549	2029	2545	4449
Tax rate	25%	30%	35%	40%	41%
Primary income source					
Earnings	37%	48%	64%	74%	82%
Unemployment benefits/welfare	24%	2%	1%	1%	0%
Disability insurance	9%	4%	3%	1%	0%
Pensions	22%	45%	31%	24%	17%
Other	8%	1%	1%	0%	1%
Total	100%	100%	100%	100%	100%

Income group	1	2	3	4	5
After-tax income (monthly)	1335	1413	2430	2814	3555
Tax rate	10%	35%	25%	35%	51%

The additional information shows that a larger fraction of people in higher income groups derive most of their income from earnings (82% in group 5 compared with 37% in group 1). Unemployment and disability benefits, on the other hand, are more prevalent in the lowest income group and pensions are particularly important in quintiles 2 and 3. The information on income sources was obtained from Statistics Netherlands. Alerting people to the prevalence of social transfers in the bottom of the income distribution may reduce the willingness to further reduce income inequality.

3 Data

The new, interactive survey item to measure preferences for redistribution was fielded in the Longitudinal Internet Studies for the Social sciences (LISS) panel. This section first describes the LISS panel. Secondly, we show some illustrative examples of preferred income

distributions constructed by respondents with the new survey item. Finally, section 3.3 describes the preferred tax rates and income inequality of the representative sample.

3.1 LISS panel

The LISS panel is an address-based sample from the Dutch population, which limits self-selection and safeguards representativeness (Van der Laan, 2009). The panel is managed by CentERdata, which is affiliated with Tilburg University.[3] Monthly surveys are administered online and panel members are provided with a computer and internet access if necessary. Members are paid for completed questionnaires. In addition to yearly data on income, wealth, political attitudes and other topics, basic demographics are available on a monthly frequency. Researchers can pay to add modules with their own questions. The module containing the item that is the focus of this study was fielded in May and June of 2018.

The sample is limited to individuals aged 25 years and older, who are either household head or partner, and who live in households that received at least 800 euros in net monthly income. These restrictions aim to exclude the very young and students and were motivated by other parts of the survey, which concern issues related to pensions and retirement. Descriptive statistics for socio-economic variables can be found in Appendix D. In addition to basic demographics, Table D1 also contains information regarding dimensions of political and economic views that have been used in the literature to measure or predict attitudes towards redistribution. In particular, we observe whether respondents think income differences should increase or decrease relative to the current situation, measured on a 5-point Likert scale in January 2018 (five months prior to our survey). As explained in the introduction, much of the literature uses such scales to measure attitudes to income redistribution. On average the LISS would prefer smaller income differences: the mean is 2.1 while 3 would indicate a preference for the status quo. Left/right political orientation and attitude towards

[3]See `http://www.lissdata.nl` and Scherpenzeel (2011) for more information on LISS.

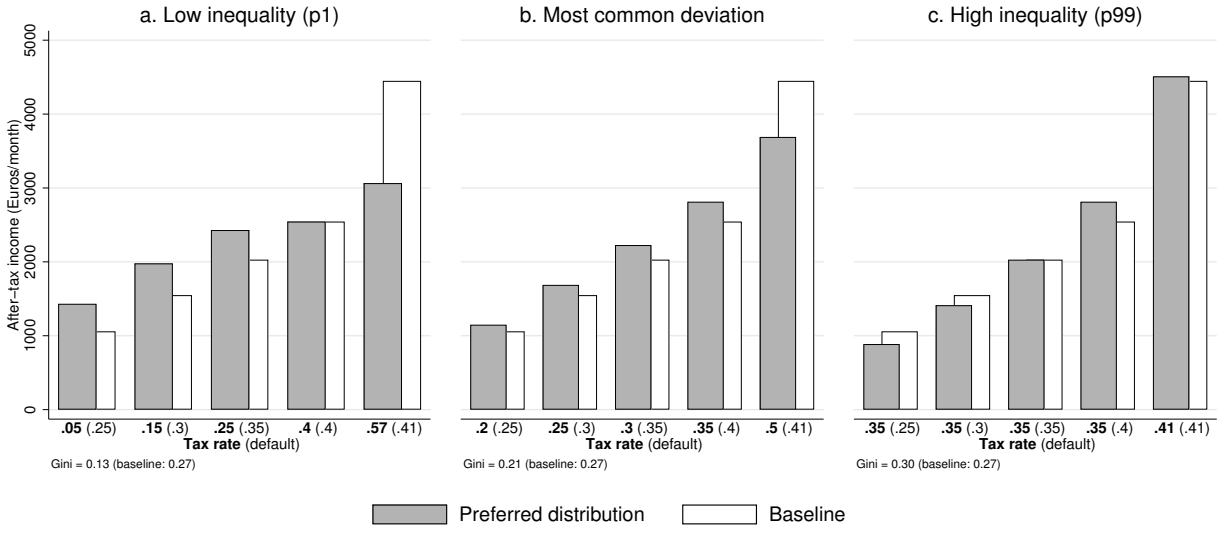


Figure 1: Examples of income distributions constructed by respondents (elasticity 0.25)

foreigners are also available from the January 2018 survey and for both measures the average lies close to the middle of the scale. The balance tests reported in Table D1 do not indicate any problems with the randomization of elasticity and information treatments.

Data from a one-off survey in February 2013 show that panel members find income tax by far the most important instrument for income redistribution. 61% of the linked sample *expect* income taxes to be the primary lever by which the government would influence income differences and 55% *prefer* the government to use income tax (see Table D2). Income-dependent premiums for health insurance and pensions are the second most mentioned measure, around 20% expect/prefer that instrument, and government transfers are a distant third at around 10%. Only 6% indicate that they do not know by which measure income redistribution would or should occur. The perceived importance of income taxation for redistribution means that the new survey item suits the preferences and expectations of a large share of the panel.

3.2 Illustrative examples

Figure 1 provides three illustrative examples of preferred income distributions constructed by respondents with the new survey item. In particular, it shows distributions with low and high Gini coefficients and the most common deviation from the current situation among all respondents who were assigned a tax elasticity of 0.25. The distribution with low inequality has lower tax rates for the bottom three income groups, keeps taxes unchanged for group four and raises taxes on the highest income group from 41% to 57%. The poorest quintile only pays 5% of income in taxes, as opposed to 25% in the status quo. The modal deviation also reduces inequality relative to the current situation, but less drastically as it lowers taxes for each of the bottom four groups evenly by 5pp. As a result, the tax rate for the highest earners increases to 50%. The distribution with high inequality, on the other hand, is less equal than the current distribution. It sets the same tax rate of 35% for all of the bottom four quintiles, which results in an unchanged tax rate of 41% for the fifth quintile. Such a distribution is as close to a flat tax as is allowed by the survey item, because tax rates are set in increments of 5pp.

The survey item helps respondents to express their preferences by graphically and numerically presenting information they can relate to, i.e. levels of after-tax income, and interactively updating that information after each change to tax rates. Perhaps as a result, many respondents spent considerable time constructing their distribution. Appendix E shows that the average timestamp is 150 seconds with a median of 102 and around three quarters of respondents took more than half a minute. Response times vary across information treatments: those who were given information on the costs of redistribution took 11% longer on average than the baseline. Quantile regressions show that both information treatments substantially increased response times in the upper half of the distribution: at the 75th percentile the 'costs' and 'income source'-treatments increased time spent by 39 and 22 seconds respectively on a baseline of 170 seconds. If time investment is a proxy for effort, all this

suggests that a large majority of respondents took the question seriously.

Every questionnaire fielded in the LISS panel ends with evaluation questions regarding the difficulty and clarity of the questions and the extent to which respondents found the topics interesting. While this evaluation refers to the survey as a whole, the redistribution question was the final one in its questionnaire so it is likely to exert a disproportionate influence on the evaluations. Indeed, both information treatments significantly increased the perceived difficulty of the survey (see Appendix F). They did not, however, significantly affect the extent to which questions were perceived as clear, interesting or enjoyable.

3.3 Descriptive statistics

Table 1 contains summary statistics for the preferred tax rates and other statistics related to the income distributions constructed by respondents. The table limits the sample to those who received the baseline information and a tax elasticity of income equal to 0.25 (Appendix G provides descriptives for all information and elasticity treatments). The mean tax rates show that on average, individuals prefer a somewhat more equal distribution than the current situation. The minimum tax rates and the 25th percentile also reflect more equal distributions, whereas the median is exactly the same as the status quo. This is in line with the fractions unchanged, which are all larger than 50%. So, when income quintiles are viewed in isolation, a majority of respondents do not change the default tax rate. Among those who do change taxes, the predominant direction is towards greater equality. E.g. for the bottom income quintile 42% choose to reduce taxes and 3% raise taxes.

The current distribution has a Gini[4] of 0.27 and 48% of respondents do not change

[4]The Gini index and Q5/Q1 ratio are two ways to measure the inequality of the optimal distributions of disposable income constructed by respondents. We calculate the Gini index for each respondent's preferred distribution as follows

$$\text{Gini} = 0.8 - 0.4 \sum_{i=1}^{4} \text{cumulperc}_i$$

Table 1: Descriptive statistics of preferred income distributions

Treatment: no additional information; elasticity 0.25											
				Quantiles					Fraction		
	Status quo	Mean	SD	Min	p25	Med	p75	Max	Lower	Unchanged	Higher
Tax rate 1	25	21	6	0	20	25	25	40	0.42	0.55	0.03
Tax rate 2	30	27	5	5	25	30	30	40	0.38	0.59	0.03
Tax rate 3	35	33	3	25	30	35	35	45	0.30	0.66	0.04
Tax rate 4	40	39	3	25	40	40	40	50	0.21	0.72	0.07
Gini index	0.27	0.24	0.04	0.08	0.21	0.27	0.27	0.33	0.47	0.48	0.05
Q5/Q1	4.2	3.7	0.7	1.7	3.2	4.2	4.2	6.2	0.48	0.48	0.04
Amount redist.[a]		476	259	70	252	479	622	1223			
Cost of redist.[a,b]		1.28	0.21	0.93	1.20	1.23	1.29	2.14			
N	659										

[a] Conditional on deviating from the status quo.
[b] Costs in euros per euro redistributed (numbers larger than 1 indicate a deadweight loss).

inequality relative to the current situation. 47% reduce inequality and only 5% prefer a more unequal distribution. Moreover, the downward adjustments tend to be larger than the increases, with a minimum Gini of 0.08 and a maximum of 0.33. The Q5/Q1-measure of inequality, which is the ratio of the after-tax income of the highest over the lowest quintile, corroborates the patterns observed for the Gini. The status quo has a Q5/Q1 ratio of 4.2 and preferred Q5/Q1s range from 1.7 to 6.2 with an approximate 50/50 split between those who keep inequality unchanged and those who prefer a more even distribution of disposable income.

The bottom two rows in Table 1 describe the amount that was redistributed between income bins *conditional* on changing the distribution (i.e. excluding zeros). The half of respondents that deviate from the status quo redistribute a substantial 476 euros per month on average with a standard deviation of 259 euros. This redistribution implies large deadweight losses, as each euro given to one (lower income) group costs 1.28 euros on average

where $\text{cumulperc}_i = \sum_{j=1}^{i} \frac{\text{income}_j}{\text{totinc}}$ and $\text{totinc} = \sum_{i=1}^{5} \text{income}_i$. Note that this index ranges from zero (complete equality) to 0.8 (complete inequality), because the distribution of income is discretized into five bins. The highest attainable inequality assigns 100% of total income to the top 20% earners with an equal distribution within that bin.

due to reductions in labor supply of those who pay higher taxes. Some individuals prefer a distribution with a smaller deadweight loss than the status quo: the minimum cost is 93 cents per euro handed out, which is obtained by lowering the maximum tax rate. However, analogous to the preference for greater equality, the vast majority of those who deviate from the current distribution incur large deadweight losses between 20 cents and 1.14 euros for each euro handed out.

Responses to the new question can be compared with those to a more conventional Likert scale asking whether income differences should be smaller or larger than the current situation. The 5-point scale elicited five months prior to the main survey indicates more widespread preference for equality beyond the status quo compared to the new measure. 61% indicated that income differences should be smaller than the status quo on the Likert scale, compared with 47% reported above. The qualitative scale finds a correspondingly smaller fraction that wants to keep the distribution as is (34% vs. 48%). While the conventional scale explicitly asks respondents to express their preference relative to the status quo, it provides no information on the current income distribution. Consequently, an expressed preference for smaller income differences could reflect either a genuine preference for more redistribution, or a mistaken view of the current distribution. One advantage of the new measure is that it increases awareness about the current income distribution, so variation in preferences is anchored on a realistic baseline.

Note that the new measures of redistributive preferences may be influenced by a status quo bias: people tend to prefer the existing state of affairs to hypothetical alternatives. Trump (2018) shows that information about actual income inequality affects which income differences are considered legitimate. Respondents may thus adjust their views on fair inequality when they are informed about actual inequality. This is a real-world relationship that may influence our results. Whereas Trump (2018) investigates this adjustment to the status quo, our new survey instrument focuses on the measurement of redistributive preferences while showing the

inherent tradeoffs of redistribution. The information experiment increases our understanding of the formation of preferences by showing efficiency costs of taxation and social insurance use to random subgroups of respondents. It is reassuring that over 75% of the sample took more than 30 seconds to complete the question. 59% of those who took at least 30 seconds constructed a more equal distribution, compared to 47% for the full sample.

Appendix G shows descriptives for the subsamples that were exposed to the information experiments and/or to a higher tax elasticity of income equal to 0.35 (instead of 0.25). When deadweight losses are made explicit and when the most important income sources are shown redistribution to low income groups declines somewhat. Furthermore, for the baseline we find that a higher tax elasticity of income increases the number of people that stick to the status quo from 48% to 54%.

4 Results

This section proceeds in two steps. First, we analyze the main effects of the information treatments on different aspects of the income distributions constructed by respondents. Second, we present associations between preferred inequality and socio-economic characteristics.

4.1 Main effects of the information experiment

Two thirds of the respondents were randomly assigned to two information treatments. The first treatment group received information regarding the deadweight loss of taxation. The second treatment group received information about the most important income sources across the distribution of after-tax income. This informed respondents about the importance of social insurance in each income quintile. Table 2 shows that both treatments significantly affect the distributions constructed by respondents, but in different ways. Information concerning the primary income source for different quintiles makes respondents 5pp more likely to stick

to the current situation, on a baseline of 49% (see panel a.). This increased enthusiasm for the current distribution corresponds to a 5pp reduction in the fraction that constructs a more equal income distribution. Separate models for each quintile show that the effect is significantly stronger for the bottom quintile compared to the other three quintiles (see Appendix H, Table H1). Comparing the income sources of the lowest income quintile with the other groups, the striking difference is the much higher prevalence of unemployment and welfare benefits. Perhaps the realization that these benefits are the primary source of income for 24% of the poorest households compared with no more than 2% in the other quintiles reduced the willingness to redistribute income to the bottom income quintile.

Panel a. of Table 2 also shows that information on efficiency costs does not cause respondents to deviate from the status quo at a significantly different rate. Nonetheless, panel b. indicates that both treatments made the optimal income distributions significantly more unequal: the resulting Gini coefficients are 0.08-0.09 standard deviation or 1.6% higher on average compared to those who received no additional information. This suggests that information on the deadweight loss especially affects those who do change the distribution away from the current situation. Showing the costs of redistribution reduces the preferred amount of redistribution. It increases the Gini by 0.15 standard deviation or 2.9% among those who deviate from the status quo. The 'income source'-treatment, on the other hand, is not significant in that subsample. Appendix H corroborates this pattern for the Q5/Q1 measure of inequality: both treatments increase average inequality of the elicited distributions and the 'efficiency costs'-treatment does this primarily through its effect on those who decide to implement changes.

The bottom panel of Table 2 shows the effect of the information treatments on the amount of redistribution relative to the current distribution. Both types of information led respondents to redistribute 27 euros less on average on a baseline of 240 euros. Among those who opt to change the distribution, the 'deadweight loss'-treatment lowers the amount redistributed

Table 2: Effect of information treatments on preferred income distributions

a. Deviations relative to status quo

		Multinomial logit		
	Any change	Lower Gini	Gini unchanged	Higher Gini
Baseline probs[a]		0.46	0.49	0.04
		(0.0162)	(0.0163)	(0.00676)
Elasticity 0.35	-0.0246	-0.0221	0.0248	-0.00266
	(0.0158)	(0.0159)	(0.0159)	(0.00650)
Info: deadweight loss	-0.00711	-0.00524	0.00712	-0.00188
	(0.0195)	(0.0194)	(0.0195)	(0.00784)
Info: income source	-0.0520***	-0.0465**	0.0521***	-0.00567
	(0.0195)	(0.0193)	(0.0195)	(0.00754)
Constant	0.505***			
	(0.0162)			
Observations	3,964		3,964	

b. Gini coefficients

	std Gini[b]		log(Gini)	
	All obs.	If change	All obs.	If change
Elasticity 0.35	-0.00467	-0.112**	-0.00356	-0.0241**
	(0.0318)	(0.0497)	(0.00573)	(0.00936)
Info: deadweight loss	0.0789**	0.145**	0.0155**	0.0289***
	(0.0390)	(0.0589)	(0.00697)	(0.0110)
Info: income source	0.0859**	0.0325	0.0142*	0.00455
	(0.0401)	(0.0632)	(0.00729)	(0.0120)
Constant	-0.0535	-0.719***	-1.434***	-1.547***
	(0.0331)	(0.0493)	(0.00596)	(0.00925)
Observations	3,964	1,876	3,964	1,876

c. Amount redistributed (euros/month)

	Amount redistributed		
	All obs.	If change	log(redist.)
Elasticity 0.35	-18.45**	-15.17	-0.0290
	(8.925)	(11.44)	(0.0311)
Info: deadweight loss	-26.78**	-47.94***	-0.114***
	(11.01)	(14.04)	(0.0385)
Info: income source	-26.60**	-4.630	-0.0175
	(11.39)	(14.62)	(0.0391)
Constant	240.4***	476.1***	5.978***
	(9.599)	(11.72)	(0.0313)
Observations	3,964	1,876	1,876

All estimates are robust to controlling for the background variables listed in Appendix D, Table D1. The estimated effects of the higher elasticity and of the information treatments are robust to limiting the sample to respondents who took at least 30 or 60 seconds to answer. Estimates for extended specifications and subsamples are available on request.

Robust standard errors in parentheses, clustered at household level (3141 clusters, 1614 in the sample that changed at least one tax rate). *** p<0.01, ** p<0.05, * p<0.1

[a] Predicted probability for elasticity of 0.25 and no additional information.

[b] Standardized Gini coefficients.

by 48 euros or 11% while the effect of the 'income source'-treatment is an insignificant 5 euros. Regardless of whether one looks at inequality or the amount of redistribution, the estimates show that information on income sources reduces the enthusiasm for further reductions in inequality and leads people to stay more often with the current distribution. Among those who do decide to implement changes, awareness of efficiency costs of taxation limits the extent of redistribution. Interactions between the elasticity of 0.35 and the information treatments are jointly and individually insignificant in all models reported in Table 2 (estimates available on request).[5] All effects of the information treatments are robust to limiting the sample to response times of at least 30 or 60 seconds (estimates available on request).

4.2 Inequality and socio-economic characteristics

Table 3 displays estimates of regressions that include socio-economic covariates in addition to the elasticity and information treatments. In light of the results discussed above, the models analyze indicators for deviating from the current distribution and standardized Gini coefficients in the complete sample as well as the subsample of deviations.[6] The table contains two specifications for each combination of dependent variable and sample: one that only includes socio-economic background variables and one that adds left/right political orientation and attitude towards foreigners. Few variables are significantly associated with the tendency to change the current distribution. Widows are 19pp more likely to stay with the status quo than those who were never married. Homemakers and retirees are around 10pp more likely to deviate relative to salary workers. Education plays an important role: those

[5]Increasing the elasticity of pre-tax income from 0.25 to 0.35 does not significantly affect the tendency to deviate from the current distribution or the preferred inequality in the full sample. While the higher elasticity reduces the amount redistributed by 18 euros, Table H2 in Appendix H shows that it does not lead to significantly different tax rate for the top quintile (neither overall, nor among those who change that rate). Therefore, we hesitate to interpret the estimated effects on the Gini for the subsample that changes the income distribution in Table 2. The mixed results for the elasticity treatment stand in sharp contrast to the information treatments, for which the same results emerge regardless of the specification.

[6]In order to render results in Tables 2 and 3 directly comparable, Gini coefficients in both tables are standardized based on the mean and standard deviation in the full sample of 3964 observations.

who finished vocational training and university are 9pp and 19pp more likely, respectively, to implement changes than their less educated peers. Income is positively related to changing the distribution, with those in the upper two thirds of the distribution of net household income 5-7pp more likely to adjust taxes. All of these associations are robust to controlling for self-reported difficulty and clarity of the questions. They may thus reflect true differences of opinion rather than variation in the extent to which respondents could formulate meaningful answers (estimates for models that control for question difficulty are available on request).

The second column of Table 3 shows that the patterns described above persist when controlling for left/right political orientation and attitude to foreigners. Both of those variables strongly predict deviation from the current distribution: those in the middle and right of the political spectrum are 10 and 13pp less likely, respectively, to change at least one tax rate. The perspective on foreigners has predictive power even when controlling for broader political views: those who are either neutral or agree that there are too many foreigners in the Netherlands are 5-8pp more likely to leave taxes unchanged than those who disagree. These results are in line with previous work on attitudes to income inequality and provide a context in which to understand the size of the effect of the 'income source'-treatment reported in panel a. of Table 2. Namely, the effect of that treatment is 5pp, or 38% of the difference between the extremes of the political spectrum.

The rightmost panel of Table 3 shows inequality of the constructed distributions as measured by Gini coefficients. When the regression is run on the complete sample, the most important covariates excluding politics are age, living with a partner, being widowed, being unemployed or a homemaker, and education. Compared to those with no education beyond secondary school, university graduates prefer the income distribution to be significantly more equal (their Gini is 0.2 standard deviation lower on average, which does not change when controlling for question difficulty). Both the currently unemployed and homemakers construct more equal distributions than salary workers, with coefficients of -0.27 and -0.15 respectively.

Table 3: Covariates of preferences for redistribution

	Changed at least 1 tax rate		Standardized Gini			
	All obs.	All obs.	All obs.	All obs.	If change	If change
Elasticity 0.35	-0.0319*	-0.0316*	0.0206	0.0207	-0.0613	-0.0638
	(0.0171)	(0.0169)	(0.0344)	(0.0338)	(0.0501)	(0.0494)
Info: deadweight loss	-0.00773	-0.00686	0.0700*	0.0645	0.108*	0.107*
	(0.0210)	(0.0209)	(0.0425)	(0.0420)	(0.0599)	(0.0595)
Info: income source	-0.0574***	-0.0545***	0.0853*	0.0765*	0.00557	-0.00279
	(0.0210)	(0.0209)	(0.0435)	(0.0430)	(0.0635)	(0.0625)
Female	-0.0115	-0.0232	-0.0371	-0.00819	-0.0994*	-0.0650
	(0.0178)	(0.0179)	(0.0365)	(0.0363)	(0.0532)	(0.0529)
Age	0.00133	0.00107	-0.00710***	-0.00639***	-0.0114***	-0.0103***
	(0.000997)	(0.000986)	(0.00196)	(0.00190)	(0.00290)	(0.00283)
Lives w partner	-0.0420	-0.0381	0.149**	0.144**	0.124	0.144
	(0.0334)	(0.0327)	(0.0655)	(0.0636)	(0.1000)	(0.0980)
Married	-0.0395	-0.0304	-0.0147	-0.0379	-0.0950	-0.135
	(0.0324)	(0.0319)	(0.0599)	(0.0573)	(0.0910)	(0.0870)
Separated	-0.0187	-0.0135	0.0109	-0.00139	9.99e-05	-0.0160
	(0.0336)	(0.0331)	(0.0702)	(0.0685)	(0.0974)	(0.0959)
Widow	-0.0252	-0.00101	-0.0648	-0.122	-0.146	-0.189
	(0.0585)	(0.0577)	(0.142)	(0.140)	(0.179)	(0.180)
Female × widow	-0.160**	-0.163**	0.357**	0.353**	0.122	0.0918
	(0.0657)	(0.0650)	(0.159)	(0.158)	(0.223)	(0.225)
No. children	-0.0118	-0.0113	0.0231	0.0210	0.0221	0.0197
	(0.0115)	(0.0114)	(0.0210)	(0.0202)	(0.0343)	(0.0329)
Homeowner	0.0377	0.0488**	-0.0143	-0.0471	0.0959	0.0542
	(0.0231)	(0.0228)	(0.0474)	(0.0467)	(0.0682)	(0.0679)
Primary activity (baseline: salary worker)						
Self-employed	-0.0219	-0.0179	0.0270	0.00891	0.0479	0.0455
	(0.0383)	(0.0375)	(0.0714)	(0.0685)	(0.113)	(0.110)
Unemployed	0.100*	0.0815	-0.271**	-0.223*	-0.203	-0.164
	(0.0605)	(0.0603)	(0.132)	(0.131)	(0.170)	(0.169)
Homemaker	0.111***	0.110***	-0.151*	-0.150*	0.000612	-0.00178
	(0.0379)	(0.0377)	(0.0814)	(0.0800)	(0.115)	(0.113)
Retired	0.0825***	0.0772**	-0.0993	-0.0896	0.0363	0.0469
	(0.0306)	(0.0303)	(0.0621)	(0.0612)	(0.0819)	(0.0808)
Disabled	0.0124	-0.00431	0.0645	0.108	0.160	0.187
	(0.0460)	(0.0460)	(0.0866)	(0.0867)	(0.140)	(0.140)
Volunteer	0.0387	0.0330	0.0683	0.0814	0.220	0.224
	(0.0599)	(0.0598)	(0.132)	(0.133)	(0.210)	(0.212)
Other	0.0146	-0.00431	-0.0985	-0.0463	-0.185	-0.124
	(0.0683)	(0.0663)	(0.147)	(0.139)	(0.210)	(0.197)
Education (baseline: lower secondary)						
Educ.: vocational	0.0866***	0.0720***	-0.0737	-0.0413	0.112	0.138*
	(0.0244)	(0.0244)	(0.0503)	(0.0502)	(0.0786)	(0.0790)
Educ.: university	0.185***	0.147***	-0.205***	-0.124**	0.0904	0.160**
	(0.0248)	(0.0255)	(0.0516)	(0.0511)	(0.0788)	(0.0794)
Educ.: other	-0.0280	-0.0397	0.135	0.155	0.161	0.156
	(0.0619)	(0.0616)	(0.136)	(0.137)	(0.248)	(0.252)
Tertiles of net household income (baseline: < 2250 euros/month)						
2250-3500	0.0700***	0.0725***	-0.0724	-0.0863	0.0748	0.0357
	(0.0253)	(0.0250)	(0.0537)	(0.0530)	(0.0729)	(0.0733)
≥ 3500	0.0528*	0.0555*	0.0716	0.0503	0.303***	0.259***
	(0.0298)	(0.0296)	(0.0594)	(0.0588)	(0.0818)	(0.0825)
Political orientation (baseline: left)						
Center		-0.0969***		0.313***		0.305***
		(0.0223)		(0.0474)		(0.0611)
Right		-0.126***		0.417***		0.446***
		(0.0250)		(0.0514)		(0.0701)
Attitude to foreigners (baseline: does NOT think there are too many foreigners in NL)						
Neutral		-0.0508**		0.0702		0.0202
		(0.0220)		(0.0434)		(0.0590)
Too many		-0.0834***		0.106**		-0.00739
		(0.0246)		(0.0465)		(0.0686)
Constant	0.331***	0.482***	0.368***	6.08e-05	-0.342*	-0.645***
	(0.0598)	(0.0630)	(0.118)	(0.122)	(0.184)	(0.189)
Observations	3,274	3,274	3,274	3,274	1,671	1,671
R-squared	0.045	0.063	0.039	0.070	0.077	0.104

Robust standard errors in parentheses (clustered at household level, 2662 clusters for the full sample and 1445 clusters for sample that changes at least one tax rate)
*** p<0.01, ** p<0.05, * p<0.1

This may be due to the fact that they are more dependent on redistribution themselves. Older respondents too prefer a more equal distribution, while those living with a partner prefer significantly more inequality than those living alone. This could be related to the fact that they are less vulnerable, due to insurance within the household (De Nardi et al., 2021). Widows, but not widowers, are remarkably tolerant of inequality: their average Gini is 0.3 standard deviation larger than that of 'never marrieds'. Household income does not predict Ginis significantly.

As was the case for the tendency to change the current distribution, controlling for political views does not change the estimates for the equation explaining Ginis. Both dimensions of politics do, moreover, predict preferred inequality. The difference between the two sides of the political spectrum is 0.42 standard deviation. The impact of both information treatments is 0.08 standard deviation or around 20% of the difference between political poles, which illustrates that the treatment effects are substantial. Attitudes about foreigners also predicts Ginis – those who think there are too many foreigners in the country prefer less equal distributions.

The final two columns in Table 3 report the same regressions for the subsample of respondents who change at least one tax rate. Most demographics are no longer significant once the sample is limited this way. Age is an exception, older individuals prefer less inequality. Among those who change, the top tertile of net household income prefers more inequality (the difference is large at 0.3 std. dev.). While differences along left/right political orientation are highly significant and of similar magnitude as in the full sample, attitude to foreigners does not have additional explanatory power. The effect of the deadweight loss treatment amounts to 25% of the difference between the ends of the political spectrum. Appendix I shows that results are robust to taking the log of the Gini, or using the income ratio Q5/Q1 as an alternative measure of inequality.

Previous work on attitudes to income redistribution found that the perceived importance

of luck and effort as drivers of economic success are significant predictors. Those who think succes is mostly driven by luck tend to view redistribution more favorably. However, our data show no evidence for such pattern: the relative importance of luck and skill is insignificant in all models (see Appendix J, Tables J1 and J2).

Appendix K contains analyses that relate respondents' ranks in the sample distribution of personal income to the tax rates chosen for the bottom four income quintiles (Tables K1 and K2). The models in Table K1 show that most income groups do not choose systematically different tax rates for their own quintile. Only the bottom income quintile sets their own tax rate 1.5pp lower on average when they implement a change. On the other hand, they are 6pp less likely to change the tax rate of the first income quintile compared to respondents in the other income groups. Table K2 shows that the top two quintiles deviate from the current distribution relatively often across the board: relative to the bottom quintile they are 6-10pp more likely to change any of the tax rates. Furthermore, they set 1-3pp higher tax rates on average for the bottom two income quintiles when they do implement changes. All in all, Appendix K does not suggest that that most people set systematically different tax rates for themselves or for the quintiles directly below or above theirs. This may reflect the fact that the question did not alert respondents to their own position in the distribution, unlike Fisman et al. (2021). However, the top 40% of personal income does tend to impose higher taxes on the bottom 40% compared to poorer individuals.

The data do not indicate effect heterogeneity of the information treatments across demographics, political views or attitudes to income differences elicited prior to the survey.[7] In particular, the effects of the information treatments do not vary significantly with income, education, either dimension of political attitudes, or the importance of luck and skill in determining economic success.

[7]Estimates for specifications that include interactions between information treatments and other variables are available on request.

5 Conclusion

Attitudes to income inequality and redistribution play an important role in political economy and public economics, because they relate to key issues such as widening inequality (Kuziemko et al., 2015), immigration (Alesina et al., 2018a, 2020) and intergenerational mobility (Alesina et al., 2018b). Existing work typically measures such attitudes in one of three ways: as a single qualitative (Likert) scale; by combining multiple quantitative and qualitative survey items on taxation and welfare programs into a single index; or through an experiment in which participants either set taxes or divide payouts between other players (see Appendix A for examples of each of these approaches). In this paper we propose a new survey question that measures attitudes quantitatively. Respondents manipulate the current income distribution by changing tax rates for the bottom four income quintiles. Taxes for the fifth quintile are adjusted automatically to keep total revenues constant, taking into account behavioral responses to tax changes (e.g. labor supply adjustments and tax evasion). Hence, respondents face realistic tradeoffs. The resulting distributions can be used to calculate preferred inequality, for instance by means of the Gini coefficient or the ratio of average income in the fifth and first quintiles.

The new measure offers several advantages. Firstly, the optimal distributions yield measures of inequality that are comparable between respondents and have a clear interpretation. Qualitative scales that ask whether income differences should be smaller, larger or stay the same may not be comparable if respondents have different ideas about the status quo or mean something else when they indicate that differences should be 'smaller'. Moreover, while qualitative measures typically conflate the issues of redistribution and social insurance (Alesina and Giuliano, 2011), the new measure focuses on income tax which is primarily redistributive. Secondly, the question combines outcomes (the income distribution) and policy instruments (taxes), bridging the disconnect found in Kuziemko et al. (2015) and emphasizing the fact that redistribution towards one group entails costs for another. Thirdly, the survey

item interactively updates the income distribution after every change to taxes. Previous research emphasizes that such interactivity increases engagement and improves data quality (Kuziemko et al., 2015). Finally, it explicitly refers to the income distribution in the population at large, which enhances external validity relative to the more artificial settings provided by experiments.

We use the new measure to study whether attitudes to redistribution are sensitive to information regarding the deadweight loss of taxation and the most important income source by quintile of the income distribution. The information treatments are randomized, enabling clean identification of causal effects. Efficiency costs can be communicated transparently, since the question accounts for behavioral responses to tax changes.[8] Information on income sources across the distribution increases the salience of social insurance, the second fundamental task of the welfare state. Previous studies found that misperception of the current income distribution influences preferences for redistribution (Karadja et al., 2017). Information about the actual income distribution in our survey instrument may influence preference for the status quo, as people may adjust their views on what is fair inequality (Trump, 2018). In real life this may contribute to increasing income inequality. We show that when people are informed about the actual income distribution, information about reliance on social insurance and about the costs of redistribution also have substantial effects on preferences for redistribution. Information thus plays an important role in public opinion formation on redistribution.

Data are collected in the LISS-panel, a representative household panel from the Dutch population. According to the new measure, respondents are split roughly equally between the current distribution and a preference for a more equal distribution. 5% would prefer *less* equality, yet virtually nobody moves beyond a flat rate to implement regressive taxes. Both information treatments increase the preferred level of inequality, but in different ways.

[8] An independent randomization assigns respondents to one of two elasticities of taxable income, which are set at 0.25 or 0.35 in line with recent literature (Saez et al., 2012).

Information on income sources raises optimal inequality by making respondents 5pp more likely to stick to the current distribution rather than construct a more equal distribution, on a baseline of 50%. This effect is 29-38% of the difference between the two sides of the political spectrum, depending on whether or not one controls for other characteristics such as education and income. Separate analyses by income quintile indicate that the effect is largest for taxes set for the bottom quintile, which depends much more strongly on transfers than the other groups. Information on income sources does not affect the size of deviations from the status quo conditional on implementing any change. Information on the inefficiencies introduced by taxation, on the other hand, increases preferred inequality by reducing the magnitude of changes, without affecting their prevalence. Among those who change, inequality as measured by the Gini index is 3% higher on average when confronted with the costs of redistribution. Analogously, the amount redistributed is reduced by 10% (48 euros on a base of 476 euros). The effects on the Gini and the amount redistributed are respectively 20-25% and 45-52% of the difference between left and right political orientation.

The overall message is that, depending on the goal, an appropriate method should be chosen to measure preferences for redistribution. We propose a new quantitative survey item, which we think has important advantages over qualitative scales, such as interpretability and interpersonal comparability. A single scale may yield a broad measure of gut-feelings, while a more elaborate one is likely to reflect a more reasoned response regarding a policy instrument such as income tax. Which one is more relevant depends on the question at hand, but there is much to be learned from asking precise questions. Furthermore, providing information has a substantial effect on preferences for redistribution. This does not only concern information about the actual (position in the) income distribution as found in previous literature, but also concerns information about the use of social insurance and the costs of redistribution.

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A Measurement of preferences for redistribution

Table A1: Measurement of preferences for redistribution

Study	Measure[a]	Sample
Ravallion and Lokshin (2000)	• *Do you agree or disagree that the government must restrict the income of the rich?* [Agree/Disagree]	Russian Longitudinal Monitoring Survey
Luttmer (2001)	• *We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money on it, or about the right amount. Issue: welfare.* [Too much/Too little/About right]	General Social Survey
Fong (2001)	• *People feel differently about how far a government should go. Here is a phrase which some people believe in and some don't. Do you think our government should or should not redistribute wealth by heavy taxes on the rich?* [Agree/Disagree] • *Some people feel that (1) the government in Washington, DC should make every possible effort to improve the social and economic position of the poor. Others feel that (2) the government should not make any special effort to help the poor, because they should help themselves. How do you feel about this?* [(1)/(2)] • *Which of the following groups do you think has the greatest responsibility for helping the poor: churches, private charities, the government, the families and relatives of poor people, the poor themselves, or someone else?* [Other group/Poor themselves] • *Do you feel that the distribution of money and wealth in this country today is fair, or do you feel that the money and wealth in this country should be more evenly distributed among a larger percentage of the people?* [Fair/Should be more even] • *Do you think that the fact that some people in the United States are rich and others are poor (1) represents a problem that needs to be fixed, or (2) is an acceptable part of our economic system?* [(1)/(2)]	Gallup Poll Social Audit Survey
Corneo (2001)	• *It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.* [(1) Strongly agree, ..., (5) Strongly disagree]	International Social Survey Program
Corneo and Grüner (2002)	• *It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.* [(1) Strongly agree, ..., (5) Strongly disagree]	International Social Survey Program
Checchi and Filippin (2004)	⋆ Experimental: tax rate over future income chosen by experimental subjects.	Collected by authors
Alesina and La Ferrara (2005)	• *The government should reduce income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor.* [(1) Completely agree, ..., (7) Completely disagree]	General Social Survey
Bernasconi (2006)	• *Generally, how would you describe taxes in [respondent's country] today? We mean all taxes together, including national insurance, income tax, VAT, and all the rest.* [(1) Much too high, ..., (5) Much too low] • *For those with high/middle/low incomes, are taxes...* [(1) Much too high, ..., (5) Much too low]	International Social Survey Program
Osberg and Smeeding (2006)	• *Do you think income differences in your country are too large?* [(1) Strongly agree, ..., (5) Strongly disagree] ⋆ Gini coefficients based on salaries that people in different occupations do earn and should earn (min. 7 and max. 9 occupations).	International Social Survey Program
Tyran and Sausgruber (2006)	⋆ Experimental: votes on proposal to redistribute payoff from 'rich' participant to 'poor' participant	Collected by authors
Rainer and Siedler (2008)	• *What do you think: is the amount of taxes paid by an unskilled worker in Germany (1) too much compared to other groups, (2) too little, or (3) exactly appropriate?* [(1)/(2)/(3)] • *And what do you think about the taxes paid by a manager on the board of directors of a large company? Does he or she pay (1) too much, (2) too little, or (3) an exactly appropriate amount in taxes compared to the other groups?* [(1)/(2)/(3)]	German Socio-Economic Panel

[a] • *Italics indicate a qualitative measurement*; ⋆ normal font indicates quantitative measurement.

Table A1 (continued): Measurement of preferences for redistribution

Study	Measure[a]	Sample
Singhal (2008)	⋆ Amount paid in taxes for income levels ($/yr) equal to 1, 2, 4, 8 times the national average.	International Social Survey Program
Murthi and Tiongson (2009)	• *'Incomes should be made more equal' (1) versus 'Income differences should be larger to provide incentives for individual effort' (10)* [(1), ..., (10)]	World Values Survey
Shayo (2009)	• *'Incomes should be made more equal' (1) versus 'Income differences should be larger to provide incentives for individual effort' (10)* [(1), ..., (10)]	World Values Survey
Klor and Shayo (2010)	⋆ Experimental: linear tax plus lump-sum redistribution scheme.	Collected by authors
Alesina and Giuliano (2011)	• *Some people think that the government in Washington should do everything to improve the standard of living of all poor Americans (they are at point 1 on this card). Other people think it is not the government's responsibility, and that each person should take care of himself (they are at point 5). Where are you placing yourself on this scale?* [(1), ..., (5)]	General Social Survey
	• *'People should take more responsibility to provide for themselves' (1) versus 'The government should take more responsibility to ensure that everyone is provided for' (10).* [(1), ..., (10)]	World Values Survey
Luttmer and Singhal (2011)	• *The government should take measures to reduce differences in income levels.* [(1) Strongly agree, ..., (5) Strongly disagree]	European Social Survey
Norton and Ariely (2011)	⋆ Division of total stock of wealth across five quintiles.	Collected by authors
Höchtl et al. (2012)	⋆ Experimental: redistribution of income between low and high-income groups [3 levels]	Collected by authors
Dahlberg et al. (2012)	• *What do you think of the following proposal: "The level of social benefits should be decreased."* [(1) Very bad idea, ..., (5) Very good idea]	Swedish National Election Studies Program
Yamamura (2012)	• Agreement with *'It is the responsibility of the government to reduce the differences in income between families with high incomes and those with low incomes.'* [(1) Strongly disagree, ..., (5) Strongly agree]	Japanese General Social Survey
Cruces et al. (2013)	• *Do you think that the government should help poor people by giving them money/food/a job?* [Yes/No; 3 answers]	Survey on Distributional Perceptions and Redistribution
Cojocaru (2014)	• *The gap between rich and poor in our country should be reduced* [(1) Strongly disagree, ..., (5) Strongly agree]	Life in Transition Survey
Yamamura (2014)	• Agreement with *'It is the responsibility of the government to reduce the differences in income between families with high incomes and those with low incomes.'* [(1) Strongly disagree, ..., (5) Strongly agree]	Japanese General Social Survey
	• *Do you think the amount of income tax you have to pay is too high?* [(1) Too low, ..., (5) Too high]	
Corneo and Neher (2015)	• Agreement with *Incomes should be made more equal (1)* vs. *We need larger income differences as incentives (10)* [(1), ..., (10)]	World Values Survey and European Values Survey
Charité et al. (2015)	⋆ Experimental: redistribution by social planner of unequal payoffs between two other workers.	Amazon's Mechanical Turk
	⋆ Tax rate imposed on individual whose income doubles to 250,000 dollar/yr.	Amazon's Mechanical Turk
Fisman et al. (2015a)	⋆ Experimental: distributions of payoff between 'self' and 'other' in 50 repeated modified dictator games with varying budgets and relative prices of redistribution.	Collected by authors (students at UC Berkeley)
Fisman et al. (2015b)	Same as Fisman et al. (2015a).	Collected by authors (students at Yale Law School and UC Berkeley); American Life Panel

[a] • *Italics indicate a qualitative measurement*; ⋆ normal font indicates quantitative measurement.

Table A1 (continued): Measurement of preferences for redistribution

Study	Measure[a]	Sample
Kuziemko et al. (2015)[b]	• *Do you think inequality is a serious problem in America?* [(1) Not a problem at all, ..., (5) A very serious problem] ⋆ Ideal average income tax rate for top 1%.[b] • *Do you think the Federal Estate Tax should be decreased, left as is, or increased?* [Decreased/Left as is/Increased] • *Do you think income taxes on millionaires should be increased, stay the same, or decreased?* [Increased/Stay the same/Decreased] • *The minimum wage is currently $7.25 per hour. Do you think it should be decreased, stay the same, or increased?* [Decreased/Stay the same/Increased]	Amazon's Mechanical Turk
Lockwood and Weinzierl (2016)	• *Upper-income households pay (1) too little taxes; (2) fair share of taxes; (3) too much taxes.* [(1)/(2)/(3)]	Amazon's Mechanical Turk
Fisman et al. (2017)	⋆ Experimental: distributions of payoff between 'self' and 'other' in 50 repeated modified dictator games with varying budgets and relative prices of redistribution. (Same as Fisman et al., 2015a.)	American Life Panel
Karadja et al. (2017)[c]	• *How much should the government influence the income distribution?* [(1) Not at all, ..., (10) Full redistribution (everyone receives same income after taxes and subsidies)] • *Would you vote for the conservative party if elections were held today?* [Yes/No] • *Would you like to change the income taxes that we have in Sweden today, and if so in what way?* [Decrease/No change/Increase]	Collected by authors in cooperation with Statistics Sweden
Alesina et al. (2018a)[d]	⋆ Difference between optimal average tax rates for top 1% of incomes and bottom 50%. • *Do you think inequality is serious problem in America?* [(1) Not a problem at all, ..., (5) A very serious problem] • *How much should the government care about income inequality?* [(1) Should not care at all, ..., (7) Should do everything in its power to reduce inequality] • *Do you favor spending more on 'schools in poor neighborhoods'/'decent housing for those who cannot afford it'/'income support programs for the poor'?* [(1) Do not favor, ..., (5) Strongly favor; three answers] ⋆ Shares of total government budget that should go to education, health, safety net, pensions and affordable housing.	Amazon's Mechanical Turk
Alesina et al. (2018b)[d]	Same as Alesina et al. (2018a)	Amazon's Mechanical Turk
Alesina et al. (2019)[e]	• *The government should take measures to reduce differences in income levels.* [(1) Strongly agree, ..., (5) Strongly disagree]	European Social Survey
Almås et al. (2020)	⋆ Experimental: spectators decide redistribution of income between two workers who have been assigned unequal incomes in real effort task.	Amazon's Mechanical Turk
Cohn et al. (2019)	Same as Almås et al. (2020)	YouGov
Fisman et al. (2020)	⋆ Experimental: distributions of payoff between 'self' and 'other' in 50 repeated modified dictator games with varying budgets and relative prices of redistribution. (Same as Fisman et al., 2015a.)	American Life Panel
Fisman et al. (2021)	⋆ Experimental: ten pairwise choices between two income distributions within experimental group that approximate the actual income distribution in the U.S.	Amazon's Mechanical Turk

[a] • *Italics indicate a qualitative measurement*; ⋆ normal font indicates quantitative measurement.

[b] The surveys analyzed in this paper include a variety of related questions, such as ideal tax rates for next 9; 40; bottom 50% (total tax revenues are not constrained to be constant). The selection mentioned here is based on a) relevance to the current paper and b) centrality in Kuziemko et al. (2015). That paper does not combine different survey items related to preferences for redistribution in a single index, but analyzes the questions separately.

[c] Karadja et al. (2017) analyze these items individually and construct an equally weighted index according to the methods set out in Kling et al. (2007).

[d] Alesina et al. (2018a) and Alesina et al. (2018b) combine the different measures of preferences for redistribution into a single index using the methods set out in Kling et al. (2007).

[e] Parts of the analysis in Alesina et al. (2019) use a single index, the first principal component, based on 8 qualitative questions. In addition to the scale in the table, these include 5-point scales for *small income differences are a prerequisite for a fair society*; *government should be responsible to ensure 'reasonable standard of living for the old'/'reasonable standard of living for the unemployed'/'sufficient child care services for working parents'*. Extent of agreement with *social benefits place too great strain on the economy*; *social benefits cost businesses too much in taxes and charges*; *social benefits make people lazy.*

B Original Dutch text of the survey question

B.1 Baseline

Herverdeling
Tot slot willen we u vragen wat volgens u de verdeling van het besteedbaar inkomen in Nederland zou moeten zijn.

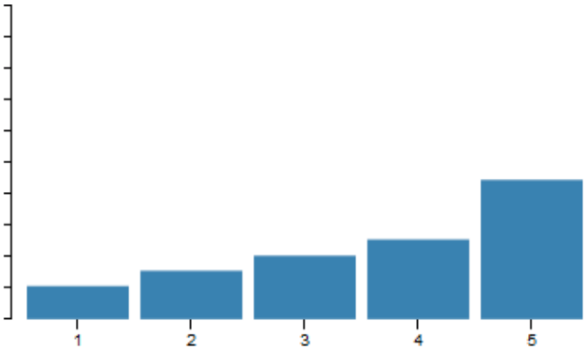
De onderstaande figuren laten de inkomensverdeling in Nederland zien. Iedereen staat op een rij van arm naar rijk. Groep 1 is de groep mensen met de laagste inkomens, groep 5 is de groep mensen met de hoogste inkomens.

In de figuur ziet u dat iemand in de armste groep gemiddeld een besteedbaar inkomen heeft van 1059 euro per persoon per maand, terwijl mensen in de rijkste groep gemiddeld een besteedbaar inkomen hebben van 4449 euro per persoon per maand (op basis van een eenpersoonshuishouden). Mensen in groep 1 betalen gemiddeld 25% van het bruto inkomen aan belasting, in groep 5 is dat 41%.

De linker figuur is ter informatie. In de rechter figuur kunt u aangeven hoe u wilt dat het inkomen verdeeld wordt.

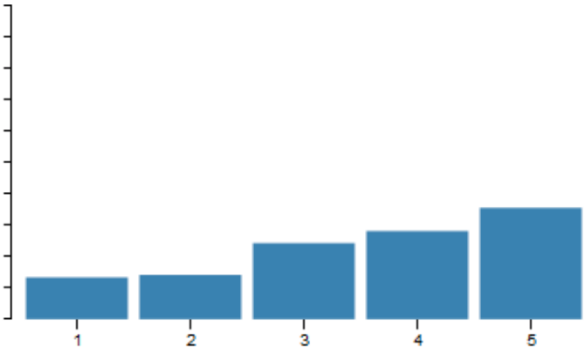
Dit werkt als volgt. U kunt de belastingen van de eerste vier inkomensgroepen verhogen of verlagen. Uw keuzes worden soms beperkt, omdat mensen in lage inkomensgroepen niet een hoger inkomen kunnen krijgen dan de mensen in de hoge inkomensgroepen. Het belastingpercentage van de rijkste groep past zich automatisch aan, zodat alle vijf groepen samen evenveel belasting betalen als nu het geval is. Eventueel kunt u terug gaan naar de beginsituatie door deze pagina te verversen/vernieuwen.

Inkomensverdeling OP DIT MOMENT



Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1059	1549	2029	2545	4449
Belastingdruk	25%	30%	35%	40%	41%

GEWENSTE inkomensverdeling

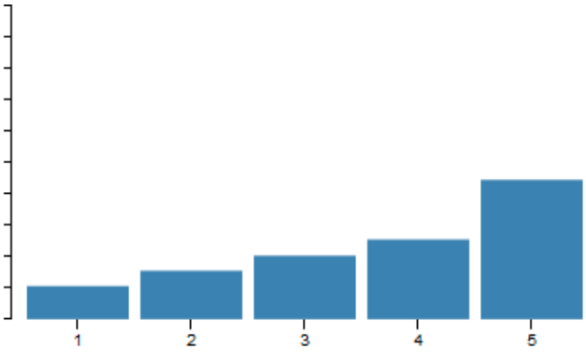


Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1335	1413	2430	2814	3555
Belastingdruk	10%	35%	25%	35%	51%

B.2 Info treatment: cost of redistribution

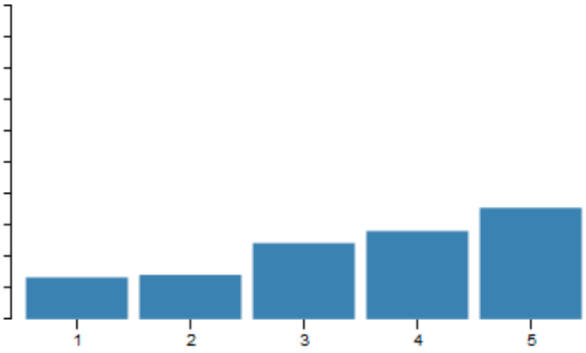
...

Inkomensverdeling OP DIT MOMENT



Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1059	1549	2029	2545	4449
Belastingdruk	25%	30%	35%	40%	41%

GEWENSTE inkomensverdeling



Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1335	1413	2430	2814	3555
Belastingdruk	10%	35%	25%	35%	51%

Bij deze keuze:

- hoeven de mensen in de groepen [1, 3 en 4] gemiddeld [246] euro **minder belasting** te betalen per persoon (als ze evenveel blijven werken).
- moeten de mensen in de groepen [2 en 5] gemiddeld [433] euro **meer belasting** betalen per persoon (als ze evenveel blijven werken).

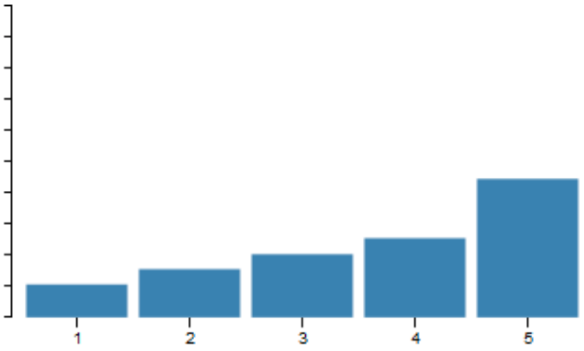
Voor elke extra euro voor de mensen in groepen [1, 3 en 4], gaat de belasting in de groepen [2 en 5] met gemiddeld 1.17 euro per persoon omhoog. Voor elke herverdeelde euro gaat er in de groepen [2 en 5] dus [**17 cent verloren**]. Dat komt omdat mensen in de groepen 2 en 5 minder gaan werken door de hogere belastingdruk.

Let wel: de bedragen in de figuur geven het besteedbaar inkomen waarbij we **wel** rekening houden met veranderingen in het aantal uren werk. Daarom komen de getallen in de figuur niet precies overeen met bovenstaande bedragen.

B.3 Info treatment: most important source of income

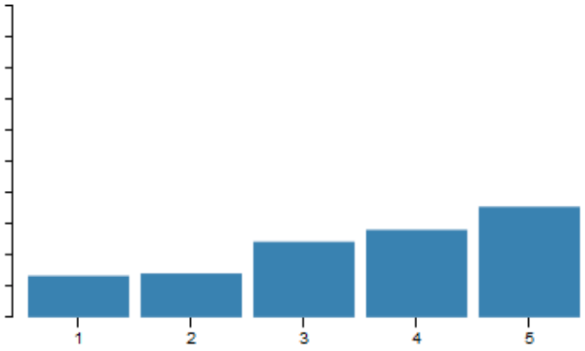
...

Inkomensverdeling OP DIT MOMENT



Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1059	1549	2029	2545	4449
Belastingdruk	25%	30%	35%	40%	41%
Belangrijkste inkomstenbron					
Werk	37%	48%	64%	74%	82%
Werkloosheid/bijstand	24%	2%	1%	1%	0%
Ziekte/AO	9%	4%	3%	1%	0%
Pensioen	22%	45%	31%	24%	17%
Overig	8%	1%	1%	0%	1%
Totaal	100%	100%	100%	100%	100%

GEWENSTE inkomensverdeling



Inkomensgroep	1	2	3	4	5
Besteedbaar inkomen (mnd)	1335	1413	2430	2814	3555
Belastingdruk	10%	35%	25%	35%	51%

C Algorithm

As explained in the main text, the new survey question analyzed in this study allows respondents to construct their preferred distribution of after-tax incomes by changing the tax rates for the four lowest income quintiles. The tax rate for the fifth quintile is automatically adjusted to keep total tax revenue constant. The algorithm behind this adjustment takes into account labor supply responses. Moreover, it calculates lower and upper bounds for the tax rates for the bottom four quintiles such that two conditions are satisfied:

1. The logical ordering of average after-tax incomes across quintiles is preserved. In particular, after changing τ_i it must be true that $netinc'_i \geq netinc_{i-1}$ and $netinc'_i \leq netinc_{i+1}$. This applies to the quintile for which the tax rate is changed and to the fifth quintile, for which taxes are adjusted to keep total revenue constant.

2. There should exist a new tax rate τ'_5 such that total tax revenue is constant.

This appendix explains the algorithm in detail.

The starting point is data regarding the average income before ($grossinc_i$) and after ($netinc_i$) tax for each quintile i of the distribution ($i \in \{1, 2, ..., 5\}$). We use household income that is equivalized to a one-person household; income data and equivalence scales were provided by Statistics Netherlands. Current tax rates are calculated as $\tau_i = 1 - {}^{netinc_i}/_{grossinc_i}$ and the tax collected as $taxcol_i = \tau_i \times grossinc_i$. Respondents change $\tau_1, ..., \tau_4$ to $\tau'_1, ..., \tau'_4$, one tax rate at a time, such that $\sum_{i=1}^{5} \tau_i \times grossinc_i = \sum_{i=1}^{5} \tau'_i \times grossinc'_i$. The changes from $grossinc_i$ to $grossinc'_i$ reflect behavioral adjustments, e.g. to labor supply or tax evasion.

Step 1: find the tax rate for the fifth quintile

As an example, say the respondent starts from the current distribution and changes the first tax rate τ_1 to τ'_1. The first step is to calculate the tax rate for the fifth quintile such that total

tax revenue is constant. If behavior would not adjust, the Net Income Change (NIC) for group 1 would be $NIC_1 = -1 \times (\tau_1' - \tau_1) \times grossinc_1$. However, people do change their behavior, generating a Behavior Change (BC) equal to $BC_1 = \frac{NIC_1}{netinc_1} \times \eta$, where η is the elasticity of income with respect to taxes (respondents are randomly assigned $\eta = 0.25$ or $\eta = 0.35$). As a result, gross income changes to $grossinc_1' = grossinc_1 \times (1 + BC_1)$. This results in a Net Income Change due to Behavior (NICB) equal to $NICB = (grossinc_1' - grossinc_1) \times (1 - \tau_1')$. The new after-tax income is given by $netinc_1' = netinc_1 + NIC_1 + NICB_1$. The new tax revenue collected from the first quintile is equal to $taxcol_1' = \tau_1' \times grossinc_1'$.

Total tax revenue should stay constant, which means the tax revenue from the fifth quintile should be $taxcol_5' = \sum_{i=1}^{5} \tau_i \times grossinc_i - \sum_{i=1}^{4} \tau_i' \times grossinc_i'$. In order to find this, note that we can apply the same logic used for quintile 1 in reverse:

$$\begin{aligned}
\tau_5' \times grossinc_5'(\tau_5') &= taxcol_5' \\
\tau_5' &= \frac{taxcol_5'}{grossinc_5'(\tau_5')} = \frac{taxcol_5'}{grossinc_5 \times (1 + LSC_5(\tau_5'))} \\
&= \frac{taxcol_5'}{grossinc_5 \times \left(1 + \left(\frac{NIC_5(\tau_5')}{netinc_5} \times \eta\right)\right)} \\
&= \frac{taxcol_5'}{grossinc_5 \times \left(1 + \left(\frac{-1 \times (\tau_5' - \tau_5) \times grossinc_5}{netinc_5} \times \eta\right)\right)}
\end{aligned}$$

We set τ_5' such that

$$\tau_5' = f(\tau_5') = \frac{taxcol_5'}{grossinc_5 \times \left(1 + \left(\frac{-1 \times (\tau_5' - \tau_5) \times grossinc_5}{netinc_5} \times \eta\right)\right)}$$

In words: we set the new tax rate such that the amount collected is exactly equal to that required to keep revenues constant, taking into account that changing taxes to τ_5' will change $grossinc_5$ to $grossinc_5'(\tau_5')$. Though the equation above is quadratic in τ_5' and thus can be

solved analytically, in our code we approximate the solution to $\tau_5' = f(\tau_5')$ by discretization of τ_5' on a grid that runs from zero to one in 10,000 steps. The second step of the algorithm, explained below, computes bounds on tax rates $\tau_1, ..., \tau_4$ that guarantee the existence of exactly one solution to the equation above for $\tau_5' \in [0, 1]$.

The costs of redistribution are computed from the hypothetical total positive and negative amounts redistributed in absence of behavioral changes. Define the total positive redistribution if there would be no behavioral responses as $TOTpositive = \sum_{i=1}^{5} \max\{0, NIC_i\}$. Analogously, define the total negative redistribution as $TOTnegative = \sum_{i=1}^{5} \min\{0, NIC_i\}$. The costs of redistribution per euro handed out are equal to $Z = \left|\frac{TOTnegative}{TOTpositive}\right|$. Similarly, the hypothetical tax changes per person are given by $PPpositive = \frac{TOTpositive}{\sum_{i=1}^{5} \mathbb{I}\{NIC_i > 0\}}$ and $PPnegative = \frac{TOTnegative}{\sum_{i=1}^{5} \mathbb{I}\{NIC_i < 0\}}$, where $\mathbb{I}\{.\}$ is an indicator function equal to one if the argument in curly brackets is true and zero otherwise.

Step 2: construct bounds for tax rates of quintiles one to four

For any combination of tax rates $\tau_1, ..., \tau_5$, we calculate the bounds between which each tax τ_i must fall in order to preserve the logical ordering of average after-tax incomes across quintiles. For each quintile $i \in \{2, ..., 5\}$, the upper bound on taxes is given by the condition that $netinc_i \geq netinc_{i-1}$. Take quintile 2 as an example. Analogously to the discussion above, the after-tax income of quintile 2 as a function of the tax rate τ_2' is given by

$$
\begin{aligned}
netinc_2'(\tau_2') &= netinc_2 + NIC_2 + NICB_2 \\
&= netinc_2 + [-1 \times (\tau_2' - \tau_2) \times grossinc_2] + [(grossinc_2' - grossinc_2) \times (1 - \tau_2')] \\
&= netinc_2 + [-1 \times (\tau_2' - \tau_2) \times grossinc_2] + \\
&\quad \left[\left(grossinc_2 \times \left(1 + \frac{-1 \times (\tau_2' - \tau_2) \times grossinc_2}{netinc_2} \times \eta\right) - grossinc_2\right) \times (1 - \tau_2')\right]
\end{aligned}
$$

The maximum tax rate $\tau_2^{\max}$ under the constraint that $netinc_2' \geq netinc_1$ is given by

$$netinc_1 = netinc_2 + [-1 \times (\tau_2^{\max} - \tau_2) \times grossinc_2] + \left[\left(grossinc_2 \times \left(1 + \frac{-1 \times (\tau_2^{\max} - \tau_2) \times grossinc_2}{netinc_2} \times \eta\right) - grossinc_2\right) \times (1 - \tau_2^{\max})\right]$$

This upper bound is found by means of a grid search across 10,000 values of τ_2' ranging from zero to one.

Similarly, there are two lower bounds that are potentially relevant for τ_2. The first is given by the fact that $netinc_2 \leq netinc_3$. This lower bound $\tau_2^{\min,1}$ is implicitly defined by

$$netinc_3 = netinc_2 + \left[-1 \times \left(\tau_2^{\min,1} - \tau_2\right) \times grossinc_2\right] + \left[\left(grossinc_2 \times \left(1 + \frac{-1 \times \left(\tau_2^{\min,1} - \tau_2\right) \times grossinc_2}{netinc_2} \times \eta\right) - grossinc_2\right) \times \left(1 - \tau_2^{\min,1}\right)\right]$$

Again, a grid search across 10,000 values of τ_2' is used to locate $\tau_2^{\min,1}$.

The second lower bound results from the fact that taxes on quintile 2 can never be so low that the resulting increase in taxes for the 5th quintile reduces its average income below that of quintile 4. This lower bound is calculated in two steps. First, we calculate the tax rate for the 5th quintile required to keep tax revenues constant for each rate τ_2 on a fine grid. In the second step we check whether each of those tax rates would be compatible with the condition that $netinc_5 \geq netinc_4$.

In particular, for each τ_2' on a grid of 10,000 values we calculate $grossinc_2'$ using the procedure described for $grossinc_1'$ in step one above. The result is 10,000 values of $taxcol_2'$, each of which implies that $taxcol_5' = \sum_{i=1}^{5} \tau_i \times grossinc_i - \sum_{i=1}^{4} \tau_i' \times grossinc_i'$. One could do the same grid search described in step 1 again and approximate τ_5' 10,000 times. However,

to save time we solved the equation analytically:

$$\tau_5' = \frac{taxcol_5'}{grossinc_5 \times \left(1 + \left(\frac{-1 \times \left(\tau_5' - \tau_5\right) \times grossinc_5}{netinc_5} \times \eta\right)\right)}$$

$$taxcol_5' = \tau_5' grossinc_5 \times \left(1 + \left(\frac{-1 \times (\tau_5' - \tau_5) \times grossinc_5}{netinc_5} \times \eta\right)\right)$$

$$taxcol_5' = \tau_5' grossinc_5 - \frac{grossinc_5^2 \times \eta}{netinc_5} \times \tau_5'^2 + \frac{\tau_5 \times grossinc_5^2 \times \eta}{netinc_5} \times \tau_5'$$

$$0 = -\frac{grossinc_5^2 \times \eta}{netinc_5} \times \tau_5'^2 + \left(grossinc_5 + \frac{\tau_5 \times grossinc_5^2 \times \eta}{netinc_5}\right) \times \tau_5' - taxcol_5'$$

Having solved the quadratic equation above for each of 10,000 values for τ_2', and thus obtained a grid of τ_5', we calculate $netinc_5'(\tau_5')$ for each one and locate the value for $\tau_2^{\min,2}$ at which $netinc_5' = netinc_4'$. Combining the two lower bounds on τ_2, the final bound is given by $\tau_2^{\min} = \max\left\{\tau_2^{\min,1}, \tau_2^{\min,2}\right\}$

Starting from a complete grid $\{0, 0.05, 0.10, 0.15, ..., 0.9, 0.95, 1\}$ for the tax rates for quintiles 1 through 4, we eliminate those combinations for which at least one tax rate is outside the bounds $\left[\tau_i^{\min}, \tau_i^{\max}\right]$ as computed above. This automatically drops all combinations of taxes for which it is impossible to raise τ_5 enough to generate constant tax revenue. Eliminating combinations of tax rates this way results in a substantial reduction in the number of possible combinations, which drops from $21^4 = 194,481$ to 16,449 for $\eta = 0.25$ and $14,124$ for $\eta = 0.35$.

The lower and upper bounds on tax rates are also used when respondents answer the question, because for any combination of tax rates each drop-down menu is restricted to values between the bounds. Moreover, since answers are provided on a scale with a resolution of 0.05, all lower bounds are rounded up to the nearest multiple of 0.05 and the upper bounds are rounded down similarly.

While the algorithm enforces that taxes on the lower four quintiles can never be so low as to reduce total tax revenue, it is possible to raise taxes on the first four quintiles to unrealistic

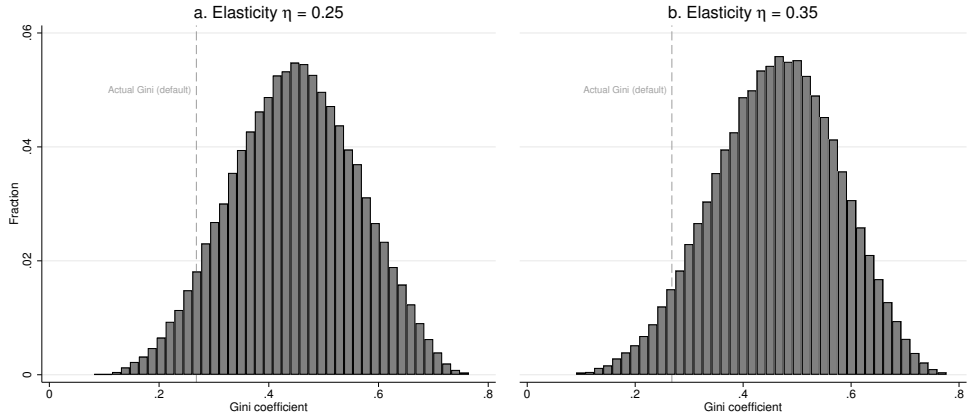


Figure C1: GINIs for all income distributions available to respondents (16,449 Ginis for $\eta = 0.25$ and 14,124 for $\eta = 0.35$)

levels such that total tax revenue increases even when the tax rate for quintile five is set to zero. Such extremely regressive tax schemes yield logically consistent income distributions in the sense that average incomes do not decrease across quintiles. While one could rule out such distributions based on the criterion that total tax revenues should be constant, or that every quintile should attain at least a minimum after-tax income, such upper bounds on taxes were not enforced. The idea was that if respondents take the exercise seriously, they would probably not impose such high tax rates that the poorer groups end up with close to zero income. This is indeed the case, since no respondent opted for a combination of taxes that results in a zero tax rate for the highest quintile. Hence, total tax revenues are constant for all preferred distributions.

The discussion above may seem to suggest that respondents were only offered a limited palet of choices. However, they did have a broad range of distributions to choose from within the constraints imposed. As an illustration of the breadth of options, Figure C1 shows the distributions of Gini-coefficients available to respondents for each elasticity. Across all distributions that could be reached, inequality varies between a minimum Gini of 0.08 and a maximum of 0.78. The actual Gini of the status-quo distribution is 0.27, so respondents were

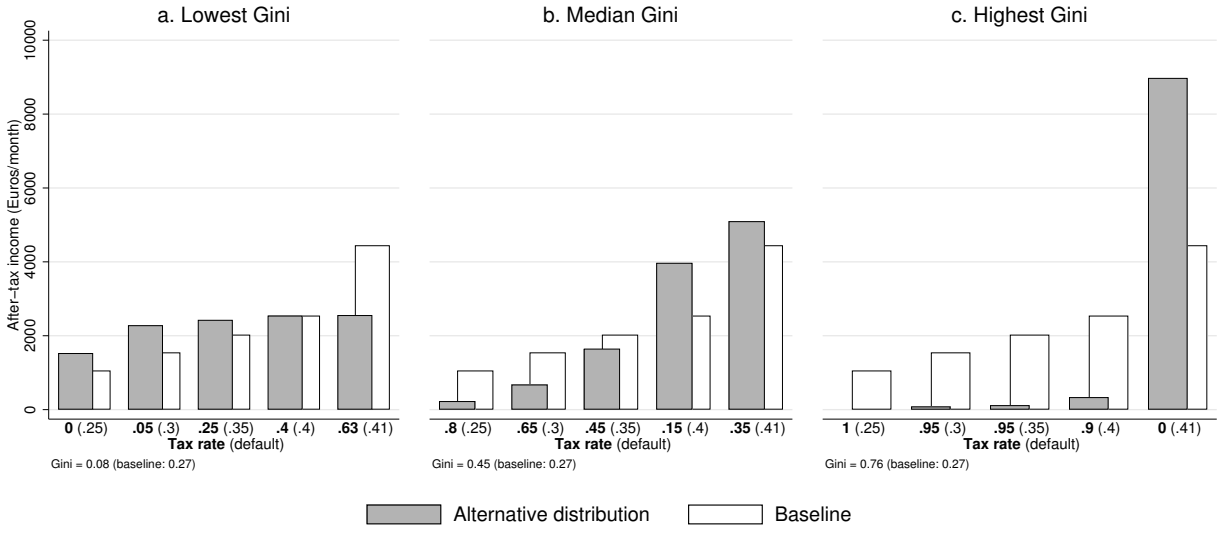


Figure C2: Examples of distributions available to respondents ($\eta = 0.25$)

free to either reduce or increase inequality. Figure C2 shows the income distributions that correspond to the lowest, median and highest Gini attainable for an elasticity of 0.25. The most equal distribution of after-tax income is obtained by reducing the tax rates for quintiles 1–3 to the minimum rates that result in non-decreasing incomes. In order to compensate for those reductions in taxes, the tax rate for the fifth quintile increases from 41 to 63%. On the opposite side of the spectrum, one achieves the highest level of inequality by setting taxes close to 100% for the lower four quintiles. In that scenario the tax rate for quintile 5 drops to zero. As discussed above and in the main text, respondents overwhelmingly opted to keep inequality constant or reduce it relative to the status quo. The highest levels of inequality that were actually chosen are those for which tax rates are close to equal across income groups, which results in Ginis around 0.3. Figures C1 and C2 show that even such higher Ginis are substantially below the median of all that could have been chosen. Hence, preferences as elicited by the survey item were not constrained towards greater equality.

D Descriptives of background variables

Table D1: Descriptive statistics of covariates

				Balance tests[a]	
	N	Mean	Std. Dev.	F-stat	p-value
Data collected in main survey (May/June 2018)					
Female	3964	0.51	0.50	0.91	0.47
Age	3964	57.1	15.6	0.34	0.89
Lives with partner	3964	0.69	0.46	1.64	0.15
Homeowner	3963	0.72	0.45	2.21	0.05
Head of household	3964	0.68	0.47	0.91	0.47
Number of children	3964	0.55	0.97	0.49	0.79
Net HH income (euros/month)	3843	3069	1525	0.89	0.49
Net pers. income (euros/month)	3944	1797	1026	0.91	0.47
Marital status					
Married	3964	0.58	0.49	0.94	0.46
Separated	3964	0.12	0.33	2.11	0.06
Widow	3964	0.08	0.27	2.13	0.06
Never married	3964	0.22	0.41	1.03	0.40
Education					
Low	3964	0.25	0.43	1.01	0.41
Middle	3964	0.32	0.47	1.46	0.20
High	3964	0.40	0.49	0.38	0.86
Other	3964	0.02	0.15	0.62	0.69
Primary activity					
Salary worker	3964	0.43	0.49	0.13	0.99
Self-employed	3964	0.06	0.24	0.15	0.98
Unemployed	3964	0.02	0.15	1.55	0.17
Homemaker	3964	0.08	0.28	0.52	0.76
Retired	3964	0.32	0.47	0.69	0.63
Disabled	3964	0.04	0.20	0.21	0.96
Voluntary work	3964	0.02	0.15	1.76	0.12
Other	3964	0.02	0.13	0.74	0.60
Luck (not effort) determines success (11-pt scale)[b]	2689	5.06	2.12	0.89	0.49
Economic/political views from prior survey (January 2018)					
Income differences should increase (5-pt scale)	3706	2.12	0.96	0.75	0.59
Left – right political orientation (11-pt scale)	3391	5.13	2.29	0.19	0.97
Too many foreigners (5-pt scale)	3797	3.07	1.07	1.33	0.25

[a] Tests the null hypothesis that all slopes are jointly zero in equation

$$y = \beta_0 + \beta_1 \mathbb{I}\{\text{elasticity: } 0.35\} + \beta_2 \mathbb{I}\{\text{info: deadweight loss}\} + \beta_3 \mathbb{I}\{\text{info: income sources}\} + \beta_4 \mathbb{I}\{\text{elasticity: } 0.35\} \times \mathbb{I}\{\text{info: deadweight loss}\} + \beta_5 \mathbb{I}\{\text{elasticity: } 0.35\} \times \mathbb{I}\{\text{info: income sources}\} + \varepsilon$$

[b] The sample size for the item on the determinants of success is smaller, because it was only presented to respondents aged 50 years or older.

Table D2: Descriptive statistics of attitudes to redistributive policies (elicited February 2013)

	Income tax	Transfers	Premiums health ins. and pensions	Other	Don't know
Expected measure (%)	61	10	19	4	6
Preferred measure (%)	55	12	22	5	6
Observations			1,061		

E Response times

Table E1: Effects of information treatments on response time in seconds (response time to the relevant question on preferred income distributions)

a. Descriptives

				Quantiles				
	N	Mean	Std. Dev.	p10	p25	p50	p75	p90
Response time (sec.)	3963	152	274	10	34	102	190	300

b. Regressions

	log(time)	p10	p25	p50	p75	p90
$\mathbb{I}\{$Elasticity 0.35$\}$	-0.0442	-0.122	0.243	-4.367	-4.084	-1.198
	(0.0426)	(1.567)	(3.169)	(4.309)	(6.548)	(12.053)
$\mathbb{I}\{$Info: deadweight loss$\}$	0.110**	0.172	0.046	13.870***	38.825***	45.698**
	(0.0520)	(1.959)	(4.141)	(5.246)	(8.038)	(18.985)
$\mathbb{I}\{$Info: income sources$\}$	0.0612	0.022	-3.075	2.212	21.564***	27.958**
	(0.0524)	(1.978)	(3.930)	(5.079)	(7.640)	(12.279)
Constant	4.275***	9.512***	35.212***	99.047***	170.177***	280.219***
	(0.0432)	(1.681)	(3.377)	(3.888)	(6.402)	(9.805)
N	3963	3963	3963	3963	3963	3963

Robust standard errors in parentheses, clustered at household level (3141 clusters)
$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

F Evaluation questions

Table F1: Evaluation questions

a. Descriptives

			Fraction equal to (%)				
	Mean	Std. Dev.	1 (not)	2	3	4	5 (very)
Questions difficult	3.2	1.4	19	14	19	24	24
Questions clear	3.6	1.1	5	12	26	31	26
Made you think	3.3	1.2	11	12	32	27	18
Topic interesting	3.4	1.2	9	11	30	29	21
Enjoyable to participate	3.4	1.2	8	11	34	25	21
N	3963						

b. Ordered logits

	Difficulty	Clearity	Made think	Interesting	Enjoyable
$\mathbb{I}\{$Elasticity 0.35$\}$	0.0177	0.0539	0.0830	0.0581	0.0290
	(0.0560)	(0.0565)	(0.0568)	(0.0568)	(0.0570)
$\mathbb{I}\{$Info: deadweight loss$\}$	0.159**	-0.0438	-0.00734	-0.0664	-0.0300
	(0.0697)	(0.0697)	(0.0714)	(0.0698)	(0.0703)
$\mathbb{I}\{$Info: income sources$\}$	0.201***	-0.0312	0.106	-0.0558	-0.0553
	(0.0702)	(0.0707)	(0.0684)	(0.0698)	(0.0703)
Log-likelihood	-6300.05	-5823.73	-6039.09	-6000.88	-5890.65
N	3963	3963	3963	3963	3963

Robust standard errors in parentheses, clustered at household level (3141 clusters).
Interaction terms between the higher elasticity and information treatments were not statistically significant in any of the models ($p > 0.73$ in joint tests, estimates available on request).
$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

G Descriptives by treatment

Table G1: Descriptive statistics of preferred income distributions; elasticity = 0.25

				Quantiles					Fraction		
	Default	Mean	SD	Min	p25	Med	p75	Max	Lower	At default	Higher
a. Treatment: baseline											
Tax rate 1	25	21	6	0	20	25	25	40	0.42	0.55	0.03
Tax rate 2	30	27	5	5	25	30	30	40	0.38	0.59	0.03
Tax rate 3	35	33	3	25	30	35	35	45	0.30	0.66	0.04
Tax rate 4	40	39	3	25	40	40	40	50	0.21	0.72	0.07
Gini index	0.27	0.24	0.04	0.08	0.21	0.27	0.27	0.33	0.47	0.48	0.05
Q5/Q1	4.2	3.7	0.7	1.7	3.2	4.2	4.2	6.2	0.48	0.48	0.04
Amount redist.[a]		476	259	70	252	479	622	1223			
Cost of redist.[a,b]		1.28	0.21	0.93	1.20	1.23	1.29	2.14			
N	659										
b. Treatment: deadweight loss											
Tax rate 1	25	21	6	0	20	25	25	45	0.40	0.58	0.02
Tax rate 2	30	27	4	10	25	30	30	40	0.37	0.62	0.02
Tax rate 3	35	34	3	25	30	35	35	45	0.25	0.72	0.03
Tax rate 4	40	39	3	25	40	40	40	50	0.18	0.75	0.06
Gini index	0.27	0.25	0.03	0.12	0.23	0.27	0.27	0.32	0.46	0.51	0.03
Q5/Q1	4.2	3.8	0.6	2.0	3.4	4.2	4.2	6.6	0.47	0.51	0.03
Amount redist.[a]		415	237	70	223	370	552	1098			
Cost of redist.[a,b]		1.29	0.24	0.93	1.20	1.23	1.29	2.14			
N	668										
c. Treatment: most important income sources											
Tax rate 1	25	22	6	0	20	25	25	45	0.34	0.64	0.02
Tax rate 2	30	28	5	10	25	30	30	50	0.33	0.65	0.02
Tax rate 3	35	34	3	25	30	35	35	45	0.26	0.70	0.03
Tax rate 4	40	39	3	25	40	40	40	55	0.18	0.75	0.07
Gini index	0.27	0.25	0.04	0.12	0.22	0.27	0.27	0.37	0.40	0.56	0.04
Q5/Q1	4.2	3.8	0.7	1.8	3.3	4.2	4.2	7.4	0.40	0.56	0.04
Amount redist.[a]		486	266	70	252	504	622	1131			
Cost of redist.[a,b]		1.28	0.20	1.04	1.20	1.23	1.29	2.14			
N	693										

[a] Conditional on deviating from the current distribution.
[b] Costs in euros per euro redistributed (numbers larger than 1 indicate a deadweight loss).

Table G2: Descriptive statistics of preferred income distributions; elasticity = 0.35

				Quantiles					Fraction		
	Default	Mean	SD	Min	p25	Med	p75	Max	Lower	At default	Higher
a. Treatment: baseline											
Tax rate 1	25	21	6	5	20	25	25	35	0.39	0.59	0.02
Tax rate 2	30	28	4	10	25	30	30	35	0.34	0.64	0.02
Tax rate 3	35	33	3	20	30	35	35	45	0.27	0.70	0.02
Tax rate 4	40	39	3	30	40	40	40	50	0.19	0.74	0.07
Gini index	0.27	0.24	0.04	0.09	0.22	0.27	0.27	0.33	0.43	0.54	0.04
Q5/Q1	4.2	3.7	0.7	1.7	3.2	4.2	4.2	6.1	0.44	0.54	0.03
Amount redist.[a]		460	245	70	252	442	622	1041			
Cost of redist.[a,b]		1.34	0.19	0.93	1.24	1.31	1.40	2.14			
N	622										
b. Treatment: deadweight loss											
Tax rate 1	25	22	6	0	20	25	25	60	0.38	0.60	0.02
Tax rate 2	30	28	4	10	25	30	30	40	0.34	0.64	0.02
Tax rate 3	35	34	3	25	30	35	35	50	0.25	0.72	0.03
Tax rate 4	40	39	3	25	40	40	40	55	0.18	0.76	0.06
Gini index	0.27	0.24	0.04	0.09	0.22	0.27	0.27	0.35	0.43	0.52	0.05
Q5/Q1	4.2	3.8	0.7	1.7	3.3	4.2	4.2	10.8	0.44	0.52	0.04
Amount redist.[a]		427	243	70	213	364	552	1041			
Cost of redist.[a,b]		1.34	0.20	0.93	1.24	1.32	1.40	2.14			
N	674										
c. Treatment: most important income sources											
Tax rate 1	25	22	6	0	20	25	25	50	0.35	0.63	0.03
Tax rate 2	30	28	4	10	25	30	30	40	0.31	0.66	0.03
Tax rate 3	35	34	3	25	30	35	35	45	0.25	0.73	0.02
Tax rate 4	40	39	3	20	40	40	40	45	0.16	0.79	0.05
Gini index	0.27	0.24	0.04	0.09	0.22	0.27	0.27	0.33	0.41	0.56	0.03
Q5/Q1	4.2	3.8	0.7	1.7	3.4	4.2	4.2	7.9	0.41	0.56	0.03
Amount redist.[a]		441	243	70	252	409	591	1041			
Cost of redist.[a,b]		1.37	0.23	0.93	1.24	1.33	1.4	2.14			
N	648										

[a] Conditional on deviating from the current distribution.
[b] Costs in euros per euro redistributed (numbers larger than 1 indicate a deadweight loss).

H Additional estimates for main effects of information treatments

Table H1: Effect of information treatments on tax rates by income quintile of the preferred distribution

	a. First quintile				**b. Second quintile**			
		Multinomial logit				Multinomial logit		
	Any change	Lower tax	Tax unchanged	Higher tax	Any change	Lower tax	Tax unchanged	Higher tax
Baseline probs[a]		0.41	0.56	0.02		0.38	0.60	0.02
		(0.0161)	(0.0162)	(0.00525)		(0.0157)	(0.0159)	(0.00481)
Elasticity 0.35	-0.0147	-0.0166	0.0150	0.00161	-0.0265*	-0.0291*	0.0271*	0.00198
	(0.0156)	(0.0158)	(0.0159)	(0.00499)	(0.0152)	(0.0154)	(0.0156)	(0.00476)
Info: deadweight loss	-0.0223	-0.0169	0.0223	-0.00540	-0.0111	-0.00949	0.0112	-0.00172
	(0.0192)	(0.0193)	(0.0193)	(0.00556)	(0.0189)	(0.0190)	(0.0191)	(0.00556)
Info: income source	-0.0640***	-0.0635***	0.0645***	-0.000997	-0.0412**	-0.0425**	0.0420**	0.000521
	(0.0191)	(0.0191)	(0.0192)	(0.00579)	(0.0189)	(0.0188)	(0.0191)	(0.00569)
Difference deadweight loss[b]					-0.0112	-0.00736	0.0110	-0.00369
					(0.0127)	(0.0124)	(0.0128)	(0.00550)
Difference inc. source[b]					-0.0228*	-0.0210*	0.0225*	-0.00152
					(0.0123)	(0.0121)	(0.0124)	(0.00551)
Constant	0.437***				0.398***			
	(0.0161)				(0.0157)			
Observations	3,964		3,964		3,964		3,964	
	c. Third quintile				**d. Fourth quintile**			
		Multinomial logit				Multinomial logit		
	Any change	Lower tax	Tax unchanged	Higher tax	Any change	Lower tax	Tax unchanged	Higher tax
Baseline probs[a]		0.29	0.67	0.04		0.21	0.72	0.07
		(0.0147)	(0.0155)	(0.00662)		(0.0132)	(0.0147)	(0.00859)
Elasticity 0.35	-0.0227	-0.0114	0.0239	-0.0125**	-0.0223	-0.0142	0.0237*	-0.00947
	(0.0143)	(0.0145)	(0.0150)	(0.00618)	(0.0136)	(0.0130)	(0.0144)	(0.00838)
Info: deadweight loss	-0.0381**	-0.0347**	0.0388**	-0.00416	-0.0260	-0.0181	0.0268	-0.00868
	(0.0180)	(0.0176)	(0.0184)	(0.00795)	(0.0171)	(0.0157)	(0.0176)	(0.0104)
Info: income source	-0.0345*	-0.0293*	0.0355*	-0.00615	-0.0397**	-0.0282*	0.0409**	-0.0127
	(0.0180	(0.0174)	(0.0184)	(0.00784)	(0.0168)	(0.0154)	(0.0173)	(0.0103)
Difference deadweight loss[b]	0.0158	0.0178	-0.0166	-0.00124	0.00374	0.00128	-0.00456	0.00328
	(0.0171)	(0.0173)	(0.0173)	(0.00909)	(0.0193)	(0.0209)	(0.0196)	(0.0116)
Difference inc. source[b]	-0.0295*	-0.0342**	0.0290*	0.00515	-0.0243	-0.0353*	0.0236	0.0117
	(0.0159)	(0.0165)	(0.0162)	(0.00916)	(0.0187)	(0.0205)	(0.0191)	(0.0117)
Constant	0.332***				0.280***			
	(0.0152)				(0.0143)			
Observations	3,964		3,964		3,964		3,964	

The models for the four income quintiles are estimated simultaneously. Robust standard errors in parentheses, clustered at household level (3141 clusters). *** p<0.01, ** p<0.05, * p<0.1

[a] Predicted probability for elasticity of 0.25 and no additional information.

[b] Difference between effects of info treatments for quintiles 2, 3 and 4 relative to quintile 1.

Table H2: Effect of information treatments on tax rates by income quintile of the preferred distribution

	a. First quintile			**b. Second quintile**		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0147	0.353*	0.569*	-0.0265*	0.301**	0.336
	(0.0156)	(0.188)	(0.326)	(0.0152)	(0.137)	(0.249)
Info: deadweight loss	-0.0223	0.381*	0.451	-0.0111	0.226	0.395
	(0.0192)	(0.229)	(0.380)	(0.0189)	(0.166)	(0.288)
Info: income source	-0.0640***	0.594**	0.0770	-0.0412**	0.271	-0.0343
	(0.0191)	(0.235)	(0.419)	(0.0189)	(0.173)	(0.322)
Constant	0.437***	21.07***	16.01***	0.398***	27.23***	23.05***
	(0.0161)	(0.200)	(0.328)	(0.0157)	(0.145)	(0.250)
Observations	3,964	3,964	1,589	3,964	3,964	1,458
Households	3,141	3,141	1,388	3,141	3,141	1,286
	c. Third quintile			**d. Fourth quintile**		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0227	-0.0462	-0.542**	-0.0223	-0.00499	-0.281
	(0.0143)	(0.0992)	(0.237)	(0.0136)	(0.0921)	(0.337)
Info: deadweight loss	-0.0381**	0.264**	0.275	-0.0260	0.121	0.193
	(0.0180)	(0.124)	(0.287)	(0.0171)	(0.113)	(0.403)
Info: income source	-0.0345*	0.161	-0.0340	-0.0397**	0.102	-0.0596
	(0.0180)	(0.123)	(0.281)	(0.0168)	(0.117)	(0.432)
Constant	0.332***	33.41***	30.23***	0.280***	39.23***	37.26***
	(0.0152)	(0.104)	(0.231)	(0.0143)	(0.100)	(0.340)
Observations	3,964	3,964	1,174	3,964	3,964	979
Households	3,141	3,141	1,054	3,141	3,141	898
	e. Fifth quintile					
	Any change	Tax rate (%)	Tax rate if change (%)			
Elasticity 0.35	-0.0266*	-0.198	-0.0417			
	(0.0158)	(0.148)	(0.230)			
Info: deadweight loss	-0.00513	-0.402**	-0.767***			
	(0.0194)	(0.183)	(0.277)			
Info: income source	-0.0560***	-0.402**	-0.0420			
	(0.0195)	(0.187)	(0.294)			
Constant	0.496***	44.41***	47.87***			
	(0.0162)	(0.160)	(0.237)			
Observations	3,964	3,964	1,833			
Households	3,141	3,141	1,579			

The models for the five income quintiles are estimated simultaneously. Robust standard errors in parentheses, clustered at household level. *** p<0.01, ** p<0.05, * p<0.1

Table H3: Effect of information treatments on Q5/Q1 of preferred income distributions

	std Q5/Q1[a]		log(Q5/Q1)	
	All obs.	If change	All obs.	If change
Elasticity 0.35	-0.00220	-0.0942*	-0.00336	-0.0240**
	(0.0317)	(0.0489)	(0.00624)	(0.00968)
Info: deadweight loss	0.0770**	0.140**	0.0162**	0.0299***
	(0.0391)	(0.0586)	(0.00767)	(0.0115)
Info: income source	0.102***	0.0646	0.0191**	0.0111
	(0.0393)	(0.0610)	(0.00785)	(0.0123)
Constant	-0.0593*	-0.742***	1.300***	1.168***
	(0.0325)	(0.0473)	(0.00648)	(0.00957)
Observations	3,964	1,876	3,964	1,876

Robust standard errors in parentheses, clustered at household level (3141 clusters, 1614 in the sample that changed at least one tax rate).
*** p<0.01, ** p<0.05, * p<0.1

[a] Standardized ratios between the fifth and first quintiles.

I Covariates of alternative measures of preferences for redistribution

Table I1: Covariates of preferences for redistribution: log(Gini)

	Dependent variable: log(Gini)			
	All obs.	All obs.	If change	If change
Elasticity 0.35	0.000973	0.000969	-0.0143	-0.0149
	(0.00615)	(0.00606)	(0.00933)	(0.00921)
Info: deadweight loss	0.0138*	0.0128*	0.0218**	0.0215**
	(0.00756)	(0.00749)	(0.0111)	(0.0110)
Info: income source	0.0143*	0.0127	0.000335	-0.00121
	(0.00787)	(0.00778)	(0.0120)	(0.0118)
Female	-0.00724	-0.00238	-0.0186*	-0.0128
	(0.00649)	(0.00645)	(0.00977)	(0.00972)
Age	-0.00121***	-0.00109***	-0.00197***	-0.00177***
	(0.000346)	(0.000336)	(0.000526)	(0.000513)
Lives w partner	0.0261**	0.0254**	0.0221	0.0260
	(0.0117)	(0.0113)	(0.0184)	(0.0180)
Married	-0.00239	-0.00643	-0.0153	-0.0226
	(0.0105)	(0.00999)	(0.0163)	(0.0156)
Separated	0.00110	-0.000995	-0.000717	-0.00344
	(0.0128)	(0.0125)	(0.0188)	(0.0185)
Widow	-0.0163	-0.0261	-0.0329	-0.0404
	(0.0266)	(0.0263)	(0.0351)	(0.0352)
Female × widow	0.0660**	0.0652**	0.0275	0.0222
	(0.0296)	(0.0295)	(0.0433)	(0.0437)
No. children	0.00365	0.00325	0.00338	0.00282
	(0.00361)	(0.00348)	(0.00601)	(0.00576)
Homeowner	-0.00152	-0.00729	0.0184	0.0108
	(0.00846)	(0.00834)	(0.0127)	(0.0126)
Primary activity (baseline: salary worker)				
Self-employed	0.00389	0.000705	0.00753	0.00702
	(0.0122)	(0.0117)	(0.0198)	(0.0193)
Unemployed	-0.0487**	-0.0403*	-0.0390	-0.0318
	(0.0235)	(0.0235)	(0.0316)	(0.0317)
Homemaker	-0.0280*	-0.0279*	-0.00437	-0.00493
	(0.0147)	(0.0144)	(0.0217)	(0.0213)
Retired	-0.0191*	-0.0175	0.00207	0.00371
	(0.0111)	(0.0110)	(0.0154)	(0.0152)
Disabled	0.0107	0.0182	0.0265	0.0312
	(0.0157)	(0.0158)	(0.0269)	(0.0270)
Volunteer	0.00891	0.0112	0.0314	0.0318
	(0.0228)	(0.0230)	(0.0364)	(0.0368)
Other	-0.0203	-0.0112	-0.0389	-0.0280
	(0.0273)	(0.0258)	(0.0415)	(0.0390)
Education (baseline: lower secondary)				
Educ.: vocational	-0.00992	-0.00434	0.0247	0.0292*
	(0.00909)	(0.00906)	(0.0151)	(0.0151)
Educ.: university	-0.0334***	-0.0196**	0.0183	0.0302**
	(0.00933)	(0.00916)	(0.0151)	(0.0150)
Educ.: other	0.0238	0.0271	0.0279	0.0260
	(0.0236)	(0.0239)	(0.0432)	(0.0441)
Tertiles of net household income (baseline: < 2250 euros/month)				
2250-2500	-0.0122	-0.0147	0.0134	0.00640
	(0.00968)	(0.00958)	(0.0138)	(0.0139)
≥ 3500	0.0139	0.0101	0.0552***	0.0474***
	(0.0105)	(0.0104)	(0.0151)	(0.0152)
Political orientation (baseline: left)				
Center		0.0562***		0.0572***
		(0.00852)		(0.0115)
Right		0.0737***		0.0805***
		(0.00914)		(0.0129)
Attitude to foreigners (baseline: does NOT think there are too many foreigners in NL)				
Neutral		0.0112		0.00237
		(0.00769)		(0.0109)
Too many		0.0163**		-0.00475
		(0.00816)		(0.0125)
Constant	-1.363***	-1.427***	-1.484***	-1.537***
	(0.0209)	(0.0215)	(0.0338)	(0.0345)
Observations	3,274	3,274	1,671	1,671
R-squared	0.039	0.068	0.078	0.103

Robust standard errors in parentheses (clustered at household level, 2662 clusters for the full sample and 1445 clusters for sample that changes at least one tax rate)
*** p<0.01, ** p<0.05, * p<0.1

Table I2: Covariates of preferences for redistribution: Q5/Q1 ratios

	Dependent variable: std Q5/Q1				Dependent variable: log(Q5/Q1)			
	All obs.	All obs.	If change	If change	All obs.	All obs.	If change	If change
Elasticity 0.35	0.0202	0.0204	-0.0522	-0.0528	0.000797	0.000804	-0.0156	-0.0160*
	(0.0347)	(0.0342)	(0.0501)	(0.0497)	(0.00676)	(0.00666)	(0.00979)	(0.00966)
Info: deadweight loss	0.0731*	0.0686	0.116*	0.115*	0.0153*	0.0143*	0.0243**	0.0241**
	(0.0427)	(0.0423)	(0.0606)	(0.0603)	(0.00834)	(0.00825)	(0.0117)	(0.0117)
Info: income source	0.100**	0.0919**	0.0363	0.0297	0.0190**	0.0173**	0.00569	0.00419
	(0.0428)	(0.0423)	(0.0617)	(0.0610)	(0.00853)	(0.00843)	(0.0124)	(0.0122)
Female	-0.0322	-0.00163	-0.0904	-0.0521	-0.00820	-0.00239	-0.0213**	-0.0142
	(0.0376)	(0.0373)	(0.0559)	(0.0553)	(0.00720)	(0.00714)	(0.0105)	(0.0104)
Age	-0.00776***	-0.00705***	-0.0126***	-0.0115***	-0.00153***	-0.00139***	-0.00250***	-0.00228***
	(0.00201)	(0.00195)	(0.00298)	(0.00289)	(0.000389)	(0.000379)	(0.000573)	(0.000558)
Lives w partner	0.149**	0.143**	0.125	0.141	0.0294**	0.0284**	0.0245	0.0283
	(0.0650)	(0.0630)	(0.0967)	(0.0943)	(0.0129)	(0.0125)	(0.0195)	(0.0191)
Married	-0.00152	-0.0248	-0.0711	-0.109	-0.000684	-0.00532	-0.0141	-0.0220
	(0.0609)	(0.0585)	(0.0915)	(0.0883)	(0.0118)	(0.0113)	(0.0178)	(0.0170)
Separated	0.0406	0.0280	0.0550	0.0389	0.00668	0.00422	0.00886	0.00573
	(0.0685)	(0.0669)	(0.0912)	(0.0901)	(0.0137)	(0.0134)	(0.0188)	(0.0185)
Widow	0.00437	-0.0552	-0.0276	-0.0732	-0.00587	-0.0174	-0.0164	-0.0253
	(0.138)	(0.136)	(0.172)	(0.172)	(0.0276)	(0.0273)	(0.0347)	(0.0348)
Female × widow	0.318**	0.317**	0.0730	0.0484	0.0681**	0.0678**	0.0222	0.0170
	(0.154)	(0.153)	(0.211)	(0.211)	(0.0310)	(0.0308)	(0.0436)	(0.0438)
No. children	0.0284	0.0268	0.0306	0.0295	0.00452	0.00414	0.00412	0.00369
	(0.0223)	(0.0217)	(0.0371)	(0.0362)	(0.00418)	(0.00406)	(0.00687)	(0.00665)
Homeowner	-0.0246	-0.0569	0.0736	0.0341	-0.00278	-0.00925	0.0186	0.0104
	(0.0503)	(0.0497)	(0.0778)	(0.0774)	(0.00946)	(0.00933)	(0.0140)	(0.0139)
Primary activity (baseline: salary worker)								
Self-employed	0.0362	0.0189	0.0622	0.0620	0.00467	0.00121	0.00792	0.00773
	(0.0783)	(0.0758)	(0.131)	(0.128)	(0.0145)	(0.0140)	(0.0234)	(0.0228)
Unemployed	-0.282**	-0.233*	-0.222	-0.184	-0.0568**	-0.0471*	-0.0466	-0.0388
	(0.127)	(0.126)	(0.153)	(0.153)	(0.0257)	(0.0256)	(0.0322)	(0.0323)
Homemaker	-0.144*	-0.143*	0.0126	0.0107	-0.0285*	-0.0283*	0.00207	0.00149
	(0.0797)	(0.0787)	(0.111)	(0.110)	(0.0158)	(0.0156)	(0.0221)	(0.0218)
Retired	-0.0812	-0.0700	0.0714	0.0865	-0.0170	-0.0149	0.0116	0.0141
	(0.0618)	(0.0608)	(0.0789)	(0.0777)	(0.0122)	(0.0120)	(0.0159)	(0.0157)
Disabled	0.0377	0.0824	0.0948	0.122	0.00849	0.0172	0.0211	0.0263
	(0.0862)	(0.0863)	(0.130)	(0.130)	(0.0173)	(0.0173)	(0.0272)	(0.0272)
Volunteer	0.0833	0.0973	0.256	0.265	0.0130	0.0156	0.0424	0.0435
	(0.134)	(0.134)	(0.216)	(0.216)	(0.0252)	(0.0253)	(0.0391)	(0.0394)
Other	-0.123	-0.0707	-0.234	-0.177	-0.0270	-0.0167	-0.0520	-0.0402
	(0.146)	(0.138)	(0.196)	(0.183)	(0.0304)	(0.0288)	(0.0430)	(0.0403)
Education (baseline: lower secondary)								
Educ.: vocational	-0.0934*	-0.0595	0.0750	0.105	-0.0160	-0.00939	0.0193	0.0250
	(0.0486)	(0.0487)	(0.0719)	(0.0730)	(0.00976)	(0.00976)	(0.0151)	(0.0152)
Educ.: university	-0.210***	-0.123**	0.0836	0.166**	-0.0409***	-0.0243**	0.0167	0.0320**
	(0.0513)	(0.0512)	(0.0746)	(0.0768)	(0.0101)	(0.0100)	(0.0153)	(0.0155)
Educ.: other	0.162	0.185	0.238	0.250	0.0288	0.0331	0.0383	0.0386
	(0.145)	(0.146)	(0.289)	(0.292)	(0.0271)	(0.0273)	(0.0510)	(0.0517)
Tertiles of net household income (baseline: < 2250 euros/month)								
2250-3500	-0.0813	-0.0939*	0.0575	0.0213	-0.0149	-0.0175*	0.0133	0.00595
	(0.0528)	(0.0519)	(0.0705)	(0.0711)	(0.0105)	(0.0104)	(0.0143)	(0.0144)
≥ 3500	0.0618	0.0435	0.285***	0.247***	0.0138	0.00988	0.0590***	0.0510***
	(0.0607)	(0.0601)	(0.0844)	(0.0859)	(0.0117)	(0.0116)	(0.0163)	(0.0165)
Political orientation (baseline: left)								
Center		0.285***		0.250***		0.0601***		0.0570***
		(0.0488)		(0.0627)		(0.00939)		(0.0121)
Right		0.396***		0.407***		0.0807***		0.0850***
		(0.0528)		(0.0723)		(0.0102)		(0.0139)
Attitude to foreigners (baseline: does NOT think there are too many foreigners in NL)								
Neutral		0.0978**		0.0689		0.0165*		0.00899
		(0.0456)		(0.0641)		(0.00865)		(0.0119)
Too many		0.144***		0.0661		0.0244***		0.00561
		(0.0476)		(0.0700)		(0.00921)		(0.0136)
Constant	0.395***	0.0171	-0.303	-0.625***	1.390***	1.316***	1.255***	1.192***
	(0.122)	(0.126)	(0.189)	(0.196)	(0.0235)	(0.0242)	(0.0366)	(0.0376)
Observations	3,274	3,274	1,671	1,671	3,274	3,274	1,671	1,671
R-squared	0.039	0.069	0.072	0.097	0.040	0.071	0.080	0.106

Robust standard errors in parentheses (clustered at household level, 2662 clusters for the full sample and 1445 clusters for sample that changes at least one tax rate)
*** p<0.01, ** p<0.05, * p<0.1

J Models that control for luck vs. skill as driver of economic success

Table J1: Covariates of preferences for redistribution incl. perceived position in HH income distribution and luck vs. skill as driver of economic success

	Changed at least one tax rate			Standardized Q5/Q1					
	All obs.	All obs.	All obs.	All obs.	All obs.	All obs.	If change	If change	If change
Elasticity 0.35	-0.0266	-0.0272	-0.0278	0.0203	0.0204	0.0214	-0.0466	-0.0486	-0.0468
	(0.0204)	(0.0204)	(0.0203)	(0.0437)	(0.0438)	(0.0434)	(0.0586)	(0.0588)	(0.0584)
Info: deadweight loss	-0.0232	-0.0222	-0.0157	0.138***	0.138***	0.123**	0.186**	0.189***	0.184**
	(0.0248)	(0.0248)	(0.0247)	(0.0533)	(0.0533)	(0.0529)	(0.0721)	(0.0719)	(0.0715)
Info: income source	-0.0876***	-0.0869***	-0.0812***	0.153***	0.153***	0.140***	0.0452	0.0497	0.0415
	(0.0249)	(0.0249)	(0.0248)	(0.0529)	(0.0530)	(0.0526)	(0.0716)	(0.0718)	(0.0712)
Female	-0.0139	-0.0140	-0.0235	-0.00820	-0.00974	0.00941	-0.0493	-0.0526	-0.0302
	(0.0219)	(0.0219)	(0.0220)	(0.0490)	(0.0490)	(0.0490)	(0.0675)	(0.0679)	(0.0691)
Age	-0.00419**	-0.00414**	-0.00337*	0.00641	0.00636	0.00439	-0.000390	-0.000443	-0.00203
	(0.00191)	(0.00191)	(0.00191)	(0.00425)	(0.00426)	(0.00421)	(0.00608)	(0.00610)	(0.00600)
Lives w partner	-0.100**	-0.0990**	-0.0920**	0.159*	0.159*	0.143	0.0175	0.0199	0.0260
	(0.0453)	(0.0454)	(0.0446)	(0.0933)	(0.0935)	(0.0911)	(0.129)	(0.130)	(0.128)
Married	-0.0102	-0.0117	0.000593	0.0321	0.0325	-0.000805	0.0272	0.0224	-0.0194
	(0.0492)	(0.0492)	(0.0483)	(0.101)	(0.101)	(0.0969)	(0.130)	(0.131)	(0.127)
Separated	-0.0437	-0.0450	-0.0342	0.106	0.106	0.0785	0.0957	0.0915	0.0656
	(0.0408)	(0.0409)	(0.0405)	(0.0871)	(0.0872)	(0.0855)	(0.106)	(0.107)	(0.107)
Widow	-0.0255	-0.0276	-0.00216	-0.0108	-0.0117	-0.0764	-0.0660	-0.0840	-0.130
	(0.0629)	(0.0627)	(0.0620)	(0.149)	(0.149)	(0.147)	(0.183)	(0.185)	(0.185)
Female × widow	-0.161**	-0.158**	-0.161**	0.292*	0.296*	0.306*	0.0350	0.0644	0.0636
	(0.0669)	(0.0667)	(0.0662)	(0.157)	(0.157)	(0.156)	(0.213)	(0.214)	(0.214)
No. children	-0.0117	-0.0113	-0.00926	0.0618*	0.0614	0.0557	0.0866	0.0850	0.0775
	(0.0175)	(0.0174)	(0.0173)	(0.0374)	(0.0374)	(0.0364)	(0.0565)	(0.0565)	(0.0548)
Homeowner	0.0541**	0.0518*	0.0589**	-0.0553	-0.0542	-0.0740	0.0464	0.0406	0.0146
	(0.0269)	(0.0271)	(0.0268)	(0.0634)	(0.0632)	(0.0625)	(0.0991)	(0.0978)	(0.0972)
Primary activity (baseline: salary worker)									
Self-employed	-0.0177	-0.0206	-0.0131	0.0559	0.0579	0.0433	0.0877	0.0894	0.100
	(0.0477)	(0.0479)	(0.0467)	(0.108)	(0.109)	(0.107)	(0.170)	(0.171)	(0.170)
Unemployed	0.134*	0.134*	0.112	-0.409**	-0.414**	-0.352**	-0.314*	-0.325**	-0.289*
	(0.0762)	(0.0760)	(0.0769)	(0.163)	(0.164)	(0.165)	(0.161)	(0.161)	(0.162)
Homemaker	0.109**	0.107**	0.0988**	-0.145	-0.144	-0.123	0.0234	0.0242	0.0322
	(0.0457)	(0.0458)	(0.0457)	(0.0963)	(0.0963)	(0.0959)	(0.130)	(0.130)	(0.131)
Retired	0.123***	0.123***	0.110***	-0.191**	-0.190**	-0.156**	-0.0127	-0.0111	0.0215
	(0.0364)	(0.0364)	(0.0364)	(0.0751)	(0.0751)	(0.0747)	(0.0947)	(0.0949)	(0.0944)
Disabled	-0.0324	-0.0297	-0.0432	0.113	0.113	0.147	0.135	0.149	0.154
	(0.0538)	(0.0539)	(0.0541)	(0.106)	(0.106)	(0.106)	(0.165)	(0.164)	(0.164)
Volunteer	0.0505	0.0513	0.0435	0.0167	0.0163	0.0374	0.169	0.170	0.188
	(0.0648)	(0.0649)	(0.0647)	(0.149)	(0.149)	(0.149)	(0.242)	(0.240)	(0.241)
Other	-0.00280	-0.00180	-0.0309	-0.165	-0.160	-0.0876	-0.372	-0.361	-0.297
	(0.112)	(0.112)	(0.109)	(0.245)	(0.246)	(0.235)	(0.247)	(0.241)	(0.234)
Education (baseline: lower secondary)									
Educ.: vocational	0.0842***	0.0829***	0.0734***	-0.0598	-0.0595	-0.0330	0.142*	0.141*	0.167**
	(0.0268)	(0.0268)	(0.0269)	(0.0547)	(0.0548)	(0.0550)	(0.0763)	(0.0763)	(0.0774)
Educ.: university	0.177***	0.175***	0.144***	-0.223***	-0.222***	-0.143**	0.0676	0.0656	0.138
	(0.0278)	(0.0278)	(0.0288)	(0.0599)	(0.0601)	(0.0600)	(0.0808)	(0.0812)	(0.0846)
Educ.: other	-0.0133	-0.0145	-0.0242	0.155	0.155	0.179	0.264	0.266	0.284
	(0.0660)	(0.0661)	(0.0654)	(0.160)	(0.160)	(0.160)	(0.311)	(0.308)	(0.310)
Tertiles of net household income (baseline: < 2250 euros/month)									
2250-3500	0.0612**	0.0611**	0.0627**	-0.0866	-0.0870	-0.0909	0.0243	0.0275	0.0137
	(0.0284)	(0.0284)	(0.0281)	(0.0619)	(0.0619)	(0.0610)	(0.0820)	(0.0817)	(0.0819)
≥ 3500	0.0580*	0.0564	0.0609*	0.0346	0.0351	0.0261	0.234**	0.236**	0.228**
	(0.0346)	(0.0347)	(0.0344)	(0.0734)	(0.0737)	(0.0729)	(0.0987)	(0.0981)	(0.100)
Importance of luck vs. skill for economic success (baseline: success is mostly caused by skill)									
Both skill and luck		-0.00703	-0.0173		0.0374	0.0594		0.0467	0.0690
		(0.0249)	(0.0249)		(0.0520)	(0.0516)		(0.0669)	(0.0662)
Mostly luck		-0.0317	-0.0368		0.0188	0.0319		-0.0737	-0.0541
		(0.0284)	(0.0282)		(0.0613)	(0.0608)		(0.0800)	(0.0793)
Political orientation (baseline: left)									
Center			-0.0792***			0.245***			0.207***
			(0.0263)			(0.0601)			(0.0733)
Right			-0.138***			0.352***			0.272***
			(0.0299)			(0.0659)			(0.0866)
Attitude to foreigners (baseline: does NOT think there are too many foreigners in NL)									
Neutral			-0.0344			0.0820			0.0603
			(0.0257)			(0.0569)			(0.0766)
Too many			-0.0580**			0.125**			0.0872
			(0.0291)			(0.0579)			(0.0812)
Constant	0.722***	0.734***	0.796***	-0.581**	-0.601**	-0.763***	-1.097***	-1.088***	-1.208***
	(0.122)	(0.123)	(0.125)	(0.271)	(0.272)	(0.273)	(0.385)	(0.384)	(0.389)
Observations	2,297	2,297	2,297	2,297	2,297	2,297	1,218	1,218	1,218
R-squared	0.057	0.058	0.073	0.034	0.034	0.056	0.039	0.042	0.056

Robust standard errors in parentheses (clustered at household level, 1872 clusters for the full sample and 1057 clusters for sample that changes at least one tax rate)
*** p<0.01, ** p<0.05, * p<0.1

Table J2: Covariates of preferences for redistribution incl. perceived position in HH income distribution and luck vs. skill as driver of economic success

	Dependent variable: standardized Gini					
	All obs.	All obs.	All obs.	If change	If change	If change
Elasticity 0.35	0.0104	0.00975	0.0111	-0.0741	-0.0770	-0.0757
	(0.0433)	(0.0433)	(0.0428)	(0.0591)	(0.0590)	(0.0586)
Info: deadweight loss	0.138***	0.139***	0.124**	0.183**	0.190***	0.185***
	(0.0535)	(0.0536)	(0.0532)	(0.0716)	(0.0718)	(0.0715)
Info: income source	0.138**	0.139**	0.125**	0.0164	0.0244	0.0154
	(0.0545)	(0.0546)	(0.0541)	(0.0754)	(0.0755)	(0.0746)
Female	-0.0215	-0.0232	-0.00544	-0.0739	-0.0775	-0.0589
	(0.0475)	(0.0474)	(0.0473)	(0.0643)	(0.0644)	(0.0650)
Age	0.00566	0.00566	0.00357	-0.00195	-0.00192	-0.00368
	(0.00432)	(0.00433)	(0.00429)	(0.00631)	(0.00634)	(0.00624)
Lives w partner	0.190**	0.192**	0.176*	0.0661	0.0692	0.0751
	(0.0965)	(0.0967)	(0.0940)	(0.141)	(0.141)	(0.139)
Married	-0.0229	-0.0243	-0.0582	-0.0620	-0.0713	-0.115
	(0.103)	(0.104)	(0.0984)	(0.140)	(0.140)	(0.135)
Separated	0.0602	0.0587	0.0292	0.0178	0.00970	-0.0231
	(0.0905)	(0.0906)	(0.0886)	(0.116)	(0.116)	(0.116)
Widow	-0.0886	-0.0922	-0.156	-0.194	-0.226	-0.274
	(0.155)	(0.155)	(0.153)	(0.193)	(0.194)	(0.194)
Female × widow	0.342**	0.348**	0.355**	0.0971	0.144	0.134
	(0.163)	(0.163)	(0.163)	(0.227)	(0.228)	(0.229)
No. children	0.0424	0.0424	0.0372	0.0531	0.0508	0.0442
	(0.0344)	(0.0345)	(0.0334)	(0.0502)	(0.0500)	(0.0479)
Homeowner	-0.0409	-0.0425	-0.0643	0.0748	0.0631	0.0315
	(0.0588)	(0.0593)	(0.0586)	(0.0836)	(0.0840)	(0.0840)
Primary activity (baseline: salary worker)						
Self-employed	0.0402	0.0387	0.0221	0.0700	0.0724	0.0758
	(0.0964)	(0.0971)	(0.0942)	(0.140)	(0.140)	(0.138)
Unemployed	-0.397**	-0.401**	-0.340**	-0.291	-0.302	-0.266
	(0.170)	(0.171)	(0.172)	(0.185)	(0.185)	(0.186)
Homemaker	-0.145	-0.145	-0.122	0.0282	0.0281	0.0403
	(0.0983)	(0.0984)	(0.0974)	(0.136)	(0.136)	(0.135)
Retired	-0.193**	-0.192**	-0.157**	-0.0183	-0.0162	0.0169
	(0.0765)	(0.0766)	(0.0761)	(0.101)	(0.101)	(0.100)
Disabled	0.144	0.148	0.183*	0.213	0.234	0.240
	(0.106)	(0.105)	(0.106)	(0.178)	(0.174)	(0.175)
Volunteer	0.0127	0.0132	0.0354	0.155	0.158	0.174
	(0.147)	(0.147)	(0.147)	(0.237)	(0.233)	(0.236)
Other	-0.111	-0.104	-0.0240	-0.260	-0.244	-0.162
	(0.236)	(0.236)	(0.226)	(0.261)	(0.247)	(0.246)
Education (baseline: lower secondary)						
Educ.: vocational	-0.0405	-0.0417	-0.0169	0.177**	0.174**	0.197**
	(0.0569)	(0.0570)	(0.0571)	(0.0842)	(0.0842)	(0.0845)
Educ.: university	-0.221***	-0.221***	-0.147**	0.0717	0.0669	0.129
	(0.0597)	(0.0599)	(0.0593)	(0.0856)	(0.0855)	(0.0870)
Educ.: other	0.122	0.121	0.143	0.172	0.175	0.181
	(0.152)	(0.152)	(0.151)	(0.271)	(0.267)	(0.268)
Tertiles of net household income (baseline: < 2250 euros/month)						
2250-3500	-0.0790	-0.0796	-0.0868	0.0403	0.0460	0.0227
	(0.0634)	(0.0634)	(0.0627)	(0.0854)	(0.0849)	(0.0851)
≥ 3500	0.0583	0.0569	0.0428	0.274***	0.279***	0.260***
	(0.0720)	(0.0721)	(0.0713)	(0.0959)	(0.0950)	(0.0965)
Importance of luck vs. skill for economic success (baseline: success is mostly caused by skill)						
Both skill and luck		0.0322	0.0543		0.0382	0.0616
		(0.0531)	(0.0529)		(0.0707)	(0.0705)
Mostly luck		-0.0177	-0.00353		-0.147*	-0.123
		(0.0624)	(0.0619)		(0.0827)	(0.0825)
Political orientation (baseline: left)						
Center			0.278***			0.266***
			(0.0585)			(0.0708)
Right			0.390***			0.340***
			(0.0645)			(0.0858)
Attitude to foreigners (baseline: does NOT think there are too many foreigners in NL)						
Neutral			0.0463			9.80e-05
			(0.0544)			(0.0708)
Too many			0.0844			0.0112
			(0.0577)			(0.0812)
Constant	-0.508*	-0.515*	-0.662**	-0.948**	-0.915**	-1.004**
	(0.276)	(0.277)	(0.276)	(0.399)	(0.400)	(0.400)
Observations	2,297	2,297	2,297	1,218	1,218	1,218
R-squared	0.033	0.033	0.057	0.047	0.053	0.070

Robust standard errors in parentheses (clustered at household level, 1872 clusters for the full sample and 1057 clusters for sample that changes at least one tax rate)
*** p<0.01, ** p<0.05, * p<0.1

K Preferred tax rates and own rank in distribution of personal income

Table K1: Quintile in distribution of personal income and tax rates by income quintile of the preferred distribution

	a. First quintile			**b. Second quintile**		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0165	0.356*	0.510	-0.0265*	0.312**	0.367
	(0.0156)	(0.188)	(0.327)	(0.0153)	(0.138)	(0.250)
Info: deadweight loss	-0.0226	0.395*	0.482	-0.0120	0.229	0.382
	(0.0192)	(0.230)	(0.381)	(0.0189)	(0.166)	(0.289)
Info: income source	-0.0627***	0.590**	0.0987	-0.0405**	0.269	-0.0231
	(0.0191)	(0.236)	(0.419)	(0.0189)	(0.173)	(0.323)
In quintile pers. inc.	-0.0587***	-0.0686	-1.547***	-0.0356*	0.135	-0.286
	(0.0184)	(0.225)	(0.380)	(0.0182)	(0.169)	(0.327)
Constant	0.449***	21.09***	16.32***	0.406***	27.20***	23.09***
	(0.0166)	(0.204)	(0.335)	(0.0161)	(0.149)	(0.258)
Observations	3,944	3,944	1,577	3,944	3,944	1,449
Households	3,134	3,134	1,379	3,134	3,134	1,279
	c. Third quintile			**d. Fourth quintile**		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0217	-0.0419	-0.507**	-0.0218	0.0108	-0.227
	(0.0143)	(0.0995)	(0.237)	(0.0136)	(0.0925)	(0.337)
Info: deadweight loss	-0.0396**	0.257**	0.227	-0.0277	0.112	0.138
	(0.0181)	(0.124)	(0.286)	(0.0171)	(0.113)	(0.401)
Info: income source	-0.0349*	0.165	-0.0289	-0.0403**	0.0985	-0.0821
	(0.0181)	(0.124)	(0.282)	(0.0168)	(0.117)	(0.431)
In quintile pers. inc.	-0.0111	0.00542	-0.161	0.0354**	-0.183	-0.324
	(0.0173)	(0.118)	(0.271)	(0.0168)	(0.119)	(0.402)
Constant	0.335***	33.41***	30.25***	0.273***	39.26***	37.32***
	(0.0158)	(0.108)	(0.236)	(0.0146)	(0.103)	(0.360)
Observations	3,944	3,944	1,169	3,944	3,944	975
Households	3,134	3,134	1,050	3,134	3,134	894

The models for the four income quintiles are estimated simultaneously. Robust standard errors in parentheses, clustered at household level. *** p<0.01, ** p<0.05, * p<0.1

Table K2: Quintile in distribution of personal income and tax rates by income quintile of the preferred distribution

	a. First quintile			b. Second quintile		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0153	0.359*	0.552*	-0.0275*	0.316**	0.374
	(0.0156)	(0.188)	(0.323)	(0.0153)	(0.138)	(0.251)
Info: deadweight loss	-0.0221	0.397*	0.547	-0.0115	0.233	0.392
	(0.0192)	(0.230)	(0.378)	(0.0189)	(0.166)	(0.286)
Info: income source	-0.0611***	0.599**	0.134	-0.0384**	0.272	-0.00703
	(0.0191)	(0.236)	(0.416)	(0.0189)	(0.174)	(0.322)
Q2 personal income	0.0267	-0.0287	0.613	0.00684	0.0958	0.407
	(0.0238)	(0.293)	(0.503)	(0.0234)	(0.220)	(0.412)
Q3 personal income	0.0339	-0.0872	0.588	0.00362	0.0544	0.191
	(0.0230)	(0.279)	(0.458)	(0.0227)	(0.212)	(0.373)
Q4 personal income	0.0774***	0.172	2.137***	0.0556**	-0.00877	0.996**
	(0.0242)	(0.297)	(0.526)	(0.0239)	(0.219)	(0.399)
Q5 personal income	0.103***	0.254	2.769***	0.0671***	0.225	1.738***
	(0.0246)	(0.291)	(0.497)	(0.0245)	(0.216)	(0.389)
Constant	0.389***	21.02***	14.72***	0.373***	27.16***	22.35***
	(0.0217)	(0.272)	(0.450)	(0.0214)	(0.203)	(0.356)
Observations	3,944	3,944	1,577	3,944	3,944	1,449
Households	3,134	3,134	1,379	3,134	3,134	1,279
	c. Third quintile			**d. Fourth quintile**		
	Any change	Tax rate (%)	Tax rate if change (%)	Any change	Tax rate (%)	Tax rate if change (%)
Elasticity 0.35	-0.0228	-0.0403	-0.520**	-0.0210	-0.00312	-0.279
	(0.0144)	(0.0995)	(0.240)	(0.0136)	(0.0922)	(0.336)
Info: deadweight loss	-0.0388**	0.256**	0.209	-0.0265	0.106	0.109
	(0.0180)	(0.124)	(0.284)	(0.0171)	(0.112)	(0.400)
Info: income source	-0.0340*	0.165	-0.0233	-0.0374**	0.0844	-0.141
	(0.0181)	(0.124)	(0.282)	(0.0168)	(0.117)	(0.429)
Q2 personal income	0.0364*	0.0395	0.830**	0.0165	0.216	1.185**
	(0.0220)	(0.155)	(0.391)	(0.0207)	(0.138)	(0.587)
Q3 personal income	0.0330	-0.0563	0.449	0.0132	0.0660	0.490
	(0.0214)	(0.151)	(0.356)	(0.0199)	(0.128)	(0.541)
Q4 personal income	0.0780***	-0.251	0.553	0.0712***	-0.215	-0.00777
	(0.0228)	(0.164)	(0.383)	(0.0215)	(0.151)	(0.553)
Q5 personal income	0.0687***	-0.0427	1.023***	0.100***	-0.480***	-0.569
	(0.0230)	(0.161)	(0.378)	(0.0222)	(0.153)	(0.524)
Constant	0.290***	33.47***	29.65***	0.241***	39.30***	37.11***
	(0.0202)	(0.141)	(0.324)	(0.0188)	(0.132)	(0.498)
Observations	3,944	3,944	1,169	3,944	3,944	975
Households	3,134	3,134	1,050	3,134	3,134	894

The models for the four income quintiles are estimated simultaneously. Robust standard errors in parentheses, clustered at household level. *** p<0.01, ** p<0.05, * p<0.1