Are people willing to pay for reduced inequality? \*

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#### Abstract

In the face of rising income inequality (Acemoglu & Autor, 2011; Atkinson, Piketty, & Saez, 2011; Piketty, 2014; World Economic Forum, 2014), one recent proposal is to provide consumers with information about the income inequality across those involved in the production of each good, at the point of purchase. This has been shown to depress overall inequality (Hill, 2020), though its impact depends crucially on whether people are willing to pay more for goods whose production involves less income inequality. Here we investigate this largely unexplored empirical question through an incentive-compatible behavioural choice experiment on a representative sample of the English population. We find that a large majority are willing to pay significantly more for goods associated with less inequality. How much more people are willing to pay varies with political leaning and increases with the extent of the inequality reduction, but is positive across the political spectrum and for all studied inequality differences. Moreover, it is typically higher when inequality is reported in more intuitive and informative formats. Our results bode well for the effectiveness of product-level inequality information provision as a tool for moderating income inequality, promising impacts even in markets where all goods involve relatively high inequality levels and potential participation across the political spectrum.

*Keywords:* Income inequality; inequality information provision; willingness to pay; inequality attitude; inequality reporting

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### **1** Introduction and Motivation

Income inequality is a topic of increasing controversy and relevance (Acemoglu & Autor, 2011; Atkinson et al., 2011; Piketty, 2014; World Economic Forum, 2014), which has only been heightened with the Covid-19 crisis. Economics has typically concentrated either on understanding revenue inequality, documenting its extent, its evolution and its potential causes, or on proposing 'downstream' policies aimed at 'curing' or 'correcting' it, principally through some form of taxation and redistribution. Accordingly, studies on public opinion have mainly focused, beyond attitudes to the inequality itself, on the public's attitudes, qua citizens, to redistribution (Kuziemko, Norton, Saez, & Stantcheva, 2015; Orton, Rowlingson, et al., 2007). However, this risks overlooking the power that the public, qua consumers, could have 'upstream' in 'preventing' income inequality—if well informed. If consumers are willing to pay more for goods whose production involves less income inequality, then informing them of the inequality associated to each good can exert downward market pressure on inequality, even before any redistribution. Indeed, recent theoretical research makes a case for the potential of blanket inequality reporting at the point of purchase as a policy intervention for controlling inequality,<sup>1</sup> showing that it can lead to a reduction in overall income inequality (Hill, 2020). However, this depends crucially on whether consumers are willing to pay for less excessive inequality in the production of the goods they purchase. Are they? How much? And how does their willingness to pay depend on the extent of the inequality reduction, the format in which inequality information is presented, or their own political leanings?

Motivated by these questions, we investigate willingness to pay (WTP) for reduced inequality across the production of goods through a pre-registered,<sup>2</sup> incentive-compatible, online behavioural choice experiment on a representative sample of the English population. Purchasing choices among goods with different inequality are seldom investigated in survey studies on inequality attitudes (e.g. ISSP Research Group, 2002; Kiatpongsan & Norton, 2014; Osberg & Smeeding, 2006), or in the Behavioral Economics literature, which has typically focused either on strategic situations where the subject's comparison of her payment against others' is salient (e.g. Camerer & Fehr, 2006; Fehr & Schmidt, 2006), or on situations where the subject chooses the inequality within a group as an outside observer (e.g. Almäs, Cappelen, & Tungodden, 2020; Johansson-Stenman, Carlsson, & Daruvala, 2002). On the other hand, this paper connects to a strand of consumer-oriented research on inequality attitudes (Benedetti & Chen, 2018; Mohan, Norton, & Deshpandé, 2015; Mohan, Schlager, Deshpandé, & Norton, 2018, e.g.), complementing it in four ways. Firstly, few existing studies measure whether and how much more people are willing to pay for goods produced with reduced inequality, focusing instead on stated measures of willingness to buy, for instance. Yet WTP is more relevant for evaluating the potential impact of inequality information provision on overall inequality (Hill, 2020). Secondly, few existing

<sup>&</sup>lt;sup>1</sup>Whilst some information about inequality at the company level is currently available (see for instance AFL-CIO 2020 and footnote 5), it is rarely provided at the product level at the point of purchase.

<sup>&</sup>lt;sup>2</sup>The public registration can be found online on the OSF platform: https://osf.io/vsk39.

studies are incentive compatible, in the sense that the mechanism relating subjects' payment to their reported choices makes it in their best interests for these reports to correctly reflect their preferences.<sup>3</sup> Yet, since the effect of inequality information must pass through consumers' purchasing decisions, an incentive-compatible elicitation helps to get closer to actual preferences, mitigating for instance the hypothetical or social desirability biases (Harrison & Rutström, 2008; Krumpal, 2013). Thirdly, this is the first experiment, to our knowledge, to elicit WTP for a range of inequality reductions, and compare a variety of inequality reporting formats. Fourthly, this is the first behavioural study on a representative sample of a population. The UK population has the advantage, from the point of view of this study, of having average attitudes to inequality situated between those in the rest of Europe and the US;<sup>4</sup> we focus on England because, unlike other nations in the UK with a strong presence of nationalist political parties, it is closest to a two-party system, hence simplifying the analysis of the relationship between WTP and political leanings.

Participants (n = 270) in our study were faced with a shopping situation in which they had a budget of £50 to spend on towel sets. They made a series of binary choices between towel sets that were comparable in all respects except for price and income inequality across the employees of the companies producing them, which were indicated. For a benchmark (very high) inequality level  $inequ_B$  and (low)  $price_B = \pounds 30$ , and each lower inequality level  $inequ_n < inequ_B$ , we elicited the price  $price_n$  such that the subject is indifferent between paying  $price_B$  for the towel set with inequality  $inequ_B$  and paying  $price_n$ for the towel set with inequality  $inequ_n$ . The WTP for the reduction in inequality from  $inequ_B$  to  $inequ_n$  is  $price_n - price_B$ . (If  $price_n < price_B$ , which was a possible response, the WTP is negative.) Each price was elicited using a version of the 'bisection method' procedure commonly used in decision under risk (Abdellaoui, Bleichrodt, & l'Haridon, 2008; Bostic, Herrnstein, & Luce, 1990; Fox & Poldrack, 2009). Under this method, subjects make straight-out binary choices, a task which is closer to real-life purchasing contexts than Multiple Price Lists, tasks asking for buying or selling prices, or willingness-to-buy reports on a Likert scale. We employed a Random Incentive Mechanism based on those standard in Behavioral Economics. Several subjects were randomly chosen and had one of their choices played 'for real': they were sent a towel set for which the price and the inequality of the company producing it corresponded approximately to those of the good they had selected in the choice, as well as their change from £50. Subjects were informed at the outset that each had an equal chance of playing a purchase question for real, but were given no information on how that question was selected (see Appendix A.4 for details). For subjects who are only interested in maximising their cash payout, as well as subjects

<sup>&</sup>lt;sup>3</sup>The only incentive-compatible study of which we are aware (Mohan et al., 2018) gives subjects the choice between equal-valued gift vouchers for firms with different income inequality levels, and hence does not focus on willingness to pay for a good from these firms.

<sup>&</sup>lt;sup>4</sup>In the ISSP Research Group (2017) data, for agreement with the statement "Income differences in country [X] are too large" on a 5-point Likert scale, the UK (M = 2.03, n = 932) lies between Europe (M = 1.74, n = 28,023) and the US (M = 2.24, n = 1,512). Similarly, on participants' ideal CEO-to-unskilled worker pay ratio (how much a CEO should earn / how much an unskilled worker should earn), the UK (Mdn = 5.3, interquartile range [3,10.4]) also lies between Europe (Mdn = 4, interquartile range [2.5, 6.7]) and the US (Mdn = 6.7, interquartile range [3.3, 17.5]).

	CEO-to-Median	Gini Index	Inequality scale	CEO: Min Wage; Median: Min Wage
	(CEO-MW)	(GI)	(IS)	(2D)
Very High ( <i>inequ</i> <sub>B</sub> )	750:1	0.55	Е	300:1; 1:3
High ( <i>inequ<sub>H</sub></i> )	250:1	0.45	D	30:1; 1:3 300:1; 3:1
Medium ( <i>inequ</i> <sub><math>M</math></sub> )	50:1	0.25	В	50:1; 1:5 500:1; 5:1
Low ( <i>inequ</i> <sub>L</sub> )	5:1	0.15	А	30:1; 3:1
Subjects	270	102	95	73

Table 1: Summary of reporting formats and inequality levels used in the experiment

who are not willing to pay more for goods with reduced inequality across production, the procedure yields an elicited WTP indistinguishable from 0.

Clearly, if consumer WTP for reduced inequality suggests the promise of product-level inequality information provision, a key question is what format to report the inequality in. To investigate the impact of inequality reporting format on WTP, we explored four reporting formats (Table 1). All participants' WTP were elicited under the CEO-to-medianworker pay ratio (CEO-MW): the ratio of the company's CEO pay to its median pay across the workforce. This is by far the most commonly used measure of company-level inequality both in practice—with recent regulations in several countries forcing publicly-listed companies to disclose this ratio<sup>5</sup>—and in the existing empirical literature on attitudes to CEO pay (e.g. Benedetti & Chen, 2018; Mohan et al., 2018). Theoretically, the CEO-MW is related to quantile ratios, which are often used in the inequality literature (Atkinson et al., 2008; Katz et al., 1999; OECD, 2020). Each participant's WTP was also elicited for one of three alternative inequality reporting formats. One group faced inequalities reported by the (company-level) Gini index (GI), which is a real number between 0 (perfect equality) and 1 (a single individual receives all the income). The Gini index is one of the most common inequality measures in the economic literature, and is standardly used for countrylevel inequality (Cingano, 2014; Forster, Chen, & Llenanozal, 2011; OECD, 2020). Data on GIs at a company level are rarer, because of the information required to calculate them (Morais & Kakabadse, 2014).<sup>6</sup> A second group received information in the form of an Inequality score (IS) on a 5-point scale of A (lowest inequality) to E (highest inequality). This ordinal format is frequently used for information provision in adjacent fields, including energy efficiency (e.g. European Union energy label), nutritional quality (e.g. the Nutriscore or 5-colour nutrition label; Chantal and Hercberg 2017), or environmental footprint (e.g. environmental score; Ceci-Renaud and Tarayoun 2016). The third group was given a 2-dimensional (2D) measure, comprising of two ratios: the ratio of the company's CEO pay to the (UK) minimum wage, and the ratio of the company's median worker pay to the minimum wage. Whilst less common than the other formats, this format can typically be

<sup>&</sup>lt;sup>5</sup>Following the adoption, by the SEC, of the Dodd-Frank Act provision requiring publicly traded firms to disclose their CEO-to-median worker pay ratios, US companies started publishing this data in their proxy statements from 2018 onwards (see sec.gov). Similar obligations are present in the UK(gov.uk) and France (economie.gouv).

<sup>&</sup>lt;sup>6</sup>Whilst calculating the CEO-MW requires two data points—the CEO salary and the median salary—the GI in principle requires pay information for all employees.

computed from the same company-level data provided to calculate the CEO-to-medianworker pay ratio, whilst being more informative. In particular, by separating up-side and down-side inequality, it allows insights into peoples' relative sensitivity to inequalities driven by excesses in the top vs. the bottom of the distribution. Note that whilst for the one-dimensional formats there is a clear ordering of the inequality levels (Table 1), in the 2D format only the highest and lowest inequality levels used in the experiment can be unequivocally ordered with respect to the others according to inequality. The intermediate levels differ from the very high inequality level by improvements in the up-side and down-side inequality respectively, and hence cannot be unequivocally compared in terms of (overall) inequality. Participants' WTP were elicited for three reductions—from the very high 'benchmark' inequality level to the three lower levels indicated in Table 1. The levels were calibrated across formats, so they correspond to approximately equivalent amounts of inequality (Appendix A.2).

### 2 Results

Figure 1 reports violin and box plots, means, medians and basic tests on WTP for different amounts of inequality reduction. It gives a preliminary flavour of our main results.

### 2.1 Are people willing to pay to reduce inequality?

As clear from Figure 1, both mean and median willingness to pay to reduce inequality are significantly higher than zero, both across inequality reductions and reporting formats. For the largest inequality reduction, mean WTP is around or higher than £10 for all reporting formats, that is to say a third of the price of the very high inequality good (£30). One-sample two-sided *t*-tests reject the null hypothesis of zero WTP for the large inequality reduction, for all reporting formats (p < 0.001 in all cases; Table 11, Appendix B.1). Moreover, two-sided binomial tests reject the null hypothesis of equal distribution of strictly positive vs. negative or zero WTP for all inequality formats and inequality reductions (p < 0.001 in all cases; Table 10, Appendix B.1). The proportion of subjects with positive WTP is above 80% for all inequality reductions under the CEO-MW format, falling the just under 70% for the lowest inequality reduction under the IS. Only 11% of subjects (29 out of 270) exhibited zero WTP across all levels of inequality reduction and reporting formats.

To check whether these results depend on the effects of subject wealth on the perception of the towel set (and in particular its price), we repeated the tests in three income categories (annual income £30000 or less; between £30000 to £74999; £75000 or more<sup>7</sup>), and obtained similar results. As an indication, Figure 6 in Appendix B.1 gives violin plots of the WTP for various inequality reductions under CEO-MW across the different wealth brackets. The WTP is in majority positive for all.

<sup>&</sup>lt;sup>7</sup>For comparison, the median self-reported pre-tax household income among our subjects was in the  $\pounds$ 30,000- $\pounds$ 39,999 bracket, and the median disposable household income in the UK in the fiscal year ending in 2019 was  $\pounds$ 29,600 (gov.uk).

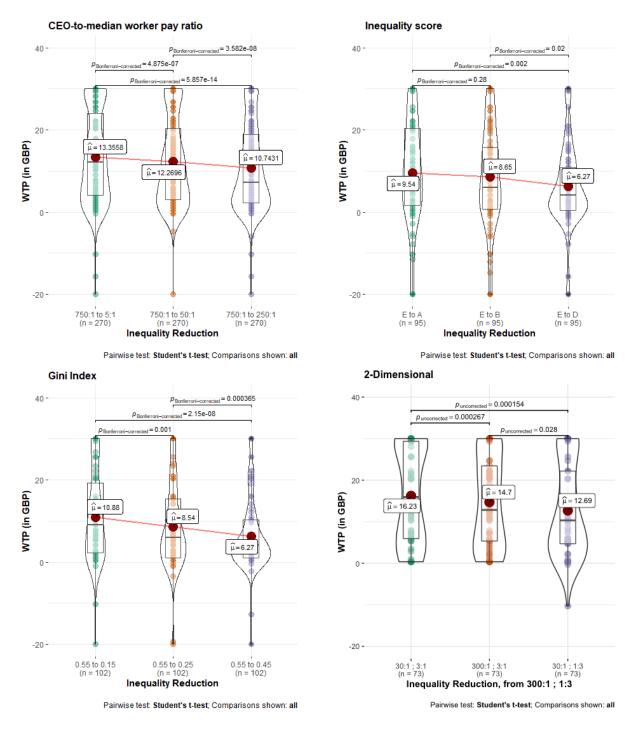


Figure 1: WTP for inequality reductions from very high inequality level  $inequ_B$  at price of £30, for each inequality format.

Since the interest in WTP is related to the potential impact of information provision, we check how our results are impacted by the extent to which participants would use inequality information if provided. During the end-of-experiment survey questions, 67% of subjects (182 out of 270) stated that they would definitely or probably use company-level inequality data when shopping (Table 12, Appendix B.1). The tests for positive WTP under the CEO-MW format continue to hold if all other subjects' WTP was set to zero.

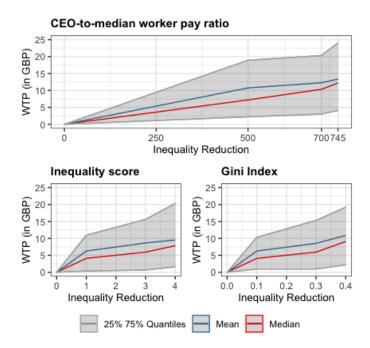


Figure 2: WTP against inequality reduction for CEO-to-MW, IS and GI formats. (In the IS format, the reductions are presented as grades, e.g. the reduction from E to D is 1.)

Note also that the theoretical effectiveness of inequality information provision does not depend on all consumers having positive WTP, but only on a non-negligible sub-population (Hill, 2020). Finally, regression analysis indicates that, for all inequality formats except IS, WTP increases with propensity to use inequality information when shopping (Table 13, Appendix B.1), meaning that WTP is typically higher than reported above for the subpopulation who are likely to pay attention to such information.

#### 2.2 Is WTP sensitive to the extent of inequality reduction?

Figure 1 suggests a general sensitivity of the WTP to the extent of inequality reduction, with most *t*-tests rejecting the null hypothesis of identical WTPs between greater and lesser amounts of inequality reduction—with p < 0.001 in the case of the CEO-MW, GI and 2D formats.<sup>8</sup> Wilcoxon signed-rank tests give similar results, with the null hypothesis rejected for all reporting formats and comparisons. Regression analysis, reported in Table 14 (Appendix B.2), shows an increasing relationship between WTP and the extent of inequality reduction. The general sensitivity holds over the vast majority of comparisons and reporting formats, with regression coefficients significant at p < 0.001 everywhere except under the IS format.

As a further illustration, Figure 2 plots mean and median WTP for inequality reduction at scale for the one-dimensional reporting formats. Beyond confirming the direction of the WTP curve, it is also suggestive as to its shape. On the basis of WTP data, we calculated

<sup>&</sup>lt;sup>8</sup>As noted in the Introduction, the intermediate 2D inequality levels are not unequivocally ordered by inequality, but they both involve more inequality than the lowest level. The reduction of inequality in the last case has significantly larger WTP than the other inequality reductions, according to the *t*-tests reported in Figure 1.

for each subject the average slope of the WTP curve between each pair of measured inequality levels (see Appendix B.2 for details). Figure 3 shows violin and box plots, means, medians and t-tests on the slope for the three one-dimensional inequality formats; associated regression analysis is reported in Table 15 (Appendix B.2).<sup>9</sup> Clearly, the WTP curve is steeper at the high end of the inequality range (between 750:1 and 250:1, E and D, 0.55 and 0.45 in the respective formats) than in the middle of the range (resp. between 250:1 and 50:1, D and B, 0.45 and 0.25) for all reporting formats. This suggests a stronger sensitivity among subjects to extreme levels of inequality, borne out in a larger impact of inequality increases in that region on WTP. Interestingly, under the CEO-MW format, there is also evidence for increased sensitivity of WTP to inequality reductions at the low end of the spectrum: according to the *t*-test in Figure 3, the slope is steeper at low inequality values (between 50:1 to 5:1) compared to the middle of the range. This could suggest that subjects typically put a premium on acceptably low inequality and are willing to pay more, in proportion, for reductions that bring inequality to such levels. Assuming that our efforts at calibrating inequality levels across formats were successful (Appendix A.2), the contrast with the other formats could be because the acceptable inequality point is more salient or recognisable to subjects under the CEO-MW format as compared to the others. Everyone understands what it means for a CEO to earn 5 times more than the average worker, but not everyone might understand how 'equal' a Gini index of 0.15 is.

Recall finally that the reductions to intermediate inequality levels in the 2D format involve reductions in up- and down-side inequality respectively—i.e. a decrease in the CEO pay from 300 to 30 times the minimum wage on the one hand, and an increase in the median worker pay from 3 times less the country's minimum wage to 3 times more on the other. Since the levels are comparable in absolute terms,<sup>10</sup> our data can speak to the question of the comparative sensitivity of WTP to inequalities driven by excessively low pay at the bottom of the distribution vs. excessively high pay at the top. The *t*-test reported in Figure 1 provides weak evidence of slightly larger WTP for the reduction in down-side inequality as compared to up-side inequality (two-sided *t*-test, t(72) = 2.24, p = 0.028), though a Wilcoxon signed-rank test falls just short of 5% significance (z = 1.702, p = 0.089). There is thus a weak suggestion of greater sensitivity to severe down-side inequality, with higher willingness to pay for an improvement in the wage of the median worker than for a comparable decrease in inequality coming via a salary reduction at the top.

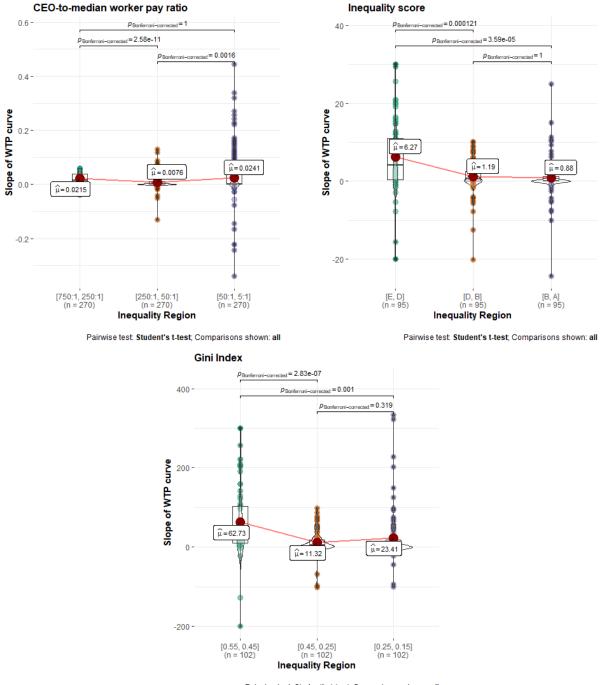
### 2.3 Is WTP sensitive to the inequality reporting format?

Recall that we explored four inequality reporting formats, with all subjects facing the CEO-MW and one other format. This enables within-subject comparison of the CEO-MW format with the others, and between-subject comparison across the latter.

As suggested by Figure 1, WTP is not equal for comparable inequality reductions across

<sup>&</sup>lt;sup>9</sup>Note that, since the scales are different, it makes no sense to compare absolute slopes across formats.

<sup>&</sup>lt;sup>10</sup>As discussed in Section A.2, the (absolute) CEO-to-median worked pay ratio can be calculated from the 2D inequality report. Indeed, it is slightly larger for the down-side inequality improvement (i.e. 300:1; 3:1) than for the up-side inequality improvement (i.e. 30:1; 1:3); see Table 7.



Pairwise test: Student's t-test; Comparisons shown: all

Figure 3: Slope of WTP and basic tests across regions of inequality reduction, for the three one-dimensional inequality reporting formats.

different inequality reporting formats. A split-plot ANOVA, with the WTP for the largest inequality reduction as the dependent variable, the CEO-MW v.s. treatment format the within factor, and the treatment format the between factor, finds a statistically significant main effect for the between factor (i.e. IS vs. GI vs. 2D format), the within factor (CEO-MW vs. the others) and their interaction (respectively: F(2, 267) = 3.63, p = 0.028; F(1, 267) = 6.20, p = 0.013; F(2, 267) = 12.15, p < 0.001).

Further analyses confirm the indication from Figure 1 that the WTP is smaller under the IS and GI formats as compared to CEO-MW, whilst suggesting that under the 2D format it is larger. For both IS and GI, two-factor repeated measures ANOVAs, where the factors are the format (i.e. CEO-MW vs. treatment format) and the inequality reduction, detect a significant main effect of the format (F(1, 94) = 18.35, p < 0.001 for IS; F(1, 101) = 21.25, p < 0.001 for GI).<sup>11</sup> Two-sided paired t-tests reject the null hypothesis of equal WTP between CEO-MW and IS for all levels of inequality reduction (t(94) = 3.21, p = 0.002for the medium inequality reduction; p < 0.001 for the other cases), and between CEO-MW and GI for the small and medium reductions in inequality (p < 0.001 in both cases; t(101) = 1.50, p = 0.136 for the large reduction). Wilcoxon signed-rank tests yield similar results. Counts reveal more subjects with higher WTP under CEO-MW than the contrary, as compared to both IS and GI (Table 16, Appendix B.3). By contrast, in the comparison between CEO-MW and the 2D format, more subjects have higher WTP under 2D. A twosided paired t-test rejects the null hypothesis of equal WTP for the largest inequality reduction<sup>12</sup> between 2D and CEO-MW (t(72) = 2.14, p = 0.036), though a Wilcoxon signed-rank test falls just short of the 5% significance level (z = 1.85, p = 0.064). This ordering of WTPs is corroborated and enriched by Welch t-tests, which fail to reject the null hypothesis of identical WTP for the largest inequality reduction between the IS and GI formats (t(184.05) = 0.80, p = 0.427), but which reject the null hypothesis in the comparison between these formats and the 2D format (t(161.81) = 3.57, p < 0.001 for IS; t(148.42) = 3.12, p = 0.002 for GI).

Assuming proper calibration of inequality levels (Appendix A.2), the observed differences in WTP across formats may be related to underlying differences in their apprehension by subjects. On the one hand, the CEO-median worker pay ratio is arguably simpler, more intuitive, easier to understand and more meaningful (to non-experts) than the Inequality score and the Gini index; subjects' more 'tenuous connection' with the reports in these latter formats could be driving their lower WTP. This explanation is coherent with subject feedback, in which between 60% and 75% report the CEO-MW format to be more informative, easier to understand and preferred to both IS and GI (Table 17, Appendix B.4). On the other hand, the hint of higher WTP under the 2D format could be related to the increased salience of the up- and down-side inequalities when reported separately. Just under 60% of subjects reported 2D to be more informative than and preferred to CEO-MW, though almost half of the subjects find the latter easier to understand.

#### 2.4 WTP and political leanings

Motivated by the political divisiveness of inequality, we also elicited subjects' reports of where they see themselves on the left/right spectrum as concerns economic policy, and

<sup>&</sup>lt;sup>11</sup>A significant effect of the reduction was detected in both cases (p < 0.001 in both cases; F(2, 188) = 19.29 for IS, F(2, 202) = 40.71 for GI), though the interaction is only barely significant in the case of GI (F(2, 188) = 0.96, p = 0.38 for IS; F(2, 202) = 4.52, p = 0.036 for GI).

<sup>&</sup>lt;sup>12</sup>As noted above, the two intermediate inequality levels under 2D are not unequivocally ordered by inequality, which hinders any comparison of these levels with the CEO-MW format.

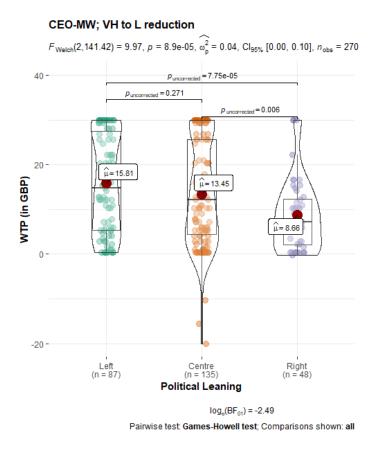


Figure 4: Distribution of WTP for largest inequality reduction, over political leanings (CEO-MW format).

which political party they consider themselves closest to. Figure 4 displays the violin and box plots, means, medians and basic tests on the WTP for the largest reduction in inequality across political leanings, under the CEO-MW format administered to all subjects.

The most important message from this Figure is that generally positive willingness to pay is pervasive across the political spectrum. Indeed, one-sample *t*-tests reject the null hypothesis of zero WTP for all amounts of inequality reduction and across the political spectrum (p < 0.001 in all cases; see Table 18, Appendix B.5), indicating strictly positive WTP for inequality reduction across the board. Wilcoxon signed-rank tests yield similar results. This finding also holds across all reported English political parties. Finally, although we concentrate on the benchmark CEO-to-median worker pay ratio, for which there are more observations, similar results hold for the other inequality reporting formats (Table 19, Appendix B.5).

As attested by the one-way Welch ANOVA reported in Figure 4, although positive across the board, WTP does vary with political leanings. Further analysis is provided by the post hoc comparisons reported in Figure 4, and a regression of WTP against political leaning and the size of the inequality reduction (Table 20, Appendix B.5). The WTP among the cohort with Right political leanings is significantly lower than for those on the Left or in the Centre of the spectrum (Games-Howell tests: t(122) = 4.37, p < 0.001 for the Left; t(119) = 3.15, p = 0.006 for the Centre; regression coefficient of Right with respect to Cen-

tre baseline  $\beta = -4.58$ , t(261) = -2.98, p = 0.003), though no significant difference was detected between these latter cohorts (t(192) = 1.55, p = 0.813). Moreover, the regression suggests that the sensitivity of the WTP to the extent of inequality reduction may depend on political leanings. Whilst the WTP of those in the Centre is increasing with the extent of inequality reduction, and the increase is more pronounced for those on the Left, the regression provides weak evidence that the WTP for those on the Right increases less dramatically, if not at all. This is comforted by separate WTP-against-inequality-reduction regression analyses for each political leaning, in which, by contrast with the Left and Centre cohorts, no significant general increase is found among those on the Right (see Appendix B.5). Similar patterns—somewhat diluted by the fact that a large proportion of subjects sympathising with the centre-right Conservative party consider themselves in the Centre of the political spectrum—hold for the comparison between sympathisers of the two main political parties, Conservatives and Labour (Table 21, Appendix B.5).

Finally, Table 23 (Appendix B.6) reports regressions of the subjects' WTP against their stated attitudes to the size of income inequality in the UK, to the desert of people with high salaries, and to government responsibility for reducing income inequality, as elicited through survey questions at the end of the experiment (Appendix A.2). WTP is significantly impacted by peoples' opinions on the size of income inequality, with average WTP (across all inequality reductions) under the CEO-MW format being significantly positive among those who strongly agree with the statement that differences in UK incomes are too large, and decreasing with every drop (on a Likert scale) in agreement (Regression (1) in Table 23, Appendix B.6). Interestingly, although attitudes to the size of inequality and government responsibility to reduce it are correlated (Spearman rank correlation  $\rho(268) = 0.5795, p < 0.001$ , a regression of the WTP against both finds a significant effect of attitudes to the size of inequality, but not of attitudes to government responsibility (Regression (4) in Table 23, Appendix B.6). Indeed, an F-test does not reject the null hypothesis of no impact of the attitude-to-government-responsibility dummy on WTP (F(4, 261) = 0.4199, p = 0.794; see Appendix B.6 for further details). This could suggest that, whilst opinions about the excessiveness of current income inequality can underlie both positive attitudes to government intervention to reduce them and willingness to pay for reduced inequality in purchased goods, the impact of these opinions on WTP is largely independent of attitudes to government action.

### 3 Discussion

Providing consumers with information about the income inequality involved in the production of goods has been shown to be a potential tool for moderating income inequality (Hill, 2020). However, the strength of its impact will hinge on peoples' willingness to pay for reduced inequality in production. Our finding of widespread positive WTP—often ranging to a third of the £30 benchmark price—bodes well for the effectiveness of such a policy. For comparison, the calibration exercise in the cited paper shows that a widespread WTP of £5 to eliminate an CEO-MW inequality of 1000:1 could cut income inequality in society by a factor of more than 20—and we find a mean WTP of £13 to almost eliminate an inequality of 750:1. Importantly, our experiment was incentivised according to the standards prevalent in Behavioral Economics: by exhibiting positive WTP, subjects (potentially) sacrifice actual cash payment for lower inequality. Moreover, WTP is positive not only for large inequality reductions (e.g. 750:1 to 5:1 in CEO-MW) but also for smaller ones (e.g. 750:1 to 250:1) from an inequality level that, though very high, is typical in the top 10% of most-unequal firms (Table 6, Appendix A.2). This suggests that, even in markets where all goods involve relatively high levels of inequality, information provision may still impact behaviour in favour of those associated with less inequality.

Beyond the headline result, our other findings further comfort the promise of information provision. First of all, while WTP varies across the political spectrum—consistent with findings that concern for inequality is related to political leanings (e.g. Kuziemko et al., 2015)—it is positive across the board, including on the right and among those close to the traditional centre-right UK political party.<sup>13</sup> Moreover, our data suggests that WTP is related to opinions concerning the size of income inequality, and that this relation is fairly independent of attitudes to government intervention. This all suggests that 'upstream' policies passing through attitudes to consumption of high-inequality goods—and in particular information provision—may be less divisive politically than 'downstream' policies, such as redistribution. For instance, whilst around 40% of UK survey respondents support government redistribution, 80% consider income inequality to be too large (Clery, Curtice, & Harding, 2017; Curtice, Clery, Perry, Phillips, & Rahim, 2019). Finally, around two-thirds of subjects stated they would definitely or probably use inequality information when shopping, if it was provided, again boding well for the translation of our WTP observations into real-world behaviour.

Our findings may also be relevant to some practical challenges facing the implementation of information provision. As argued in Hill (2020), while a fair amount of data on firm-level inequality is in the public domain or available to government institutions (e.g. in tax returns), it is at present not available to consumers in a convenient format at the point of purchase. The cited paper proposes the development of a mobile phone application as a possible way of delivering inequality information to consumers. One issue is which inequality format to report, and whilst there is a rich literature on inequality measures (Chakravarty, 2009; Cowell, 2011; Lambert, 2001), little has focused on their usefulness for communicating product-level inequality to consumers. In particular, a central quality of an inequality measure in this context is how easily it is grasped by typical members of the public, who have no specialist knowledge or theoretical baggage. Our results suggest that, for all its weaknesses as a comprehensive inequality measure, the CEO-median worker

<sup>&</sup>lt;sup>13</sup>This is in contrast to Mohan et al. (2018), who find, on a non-representative (mTurk) US cohort in a nonincentive-compatible between-subject design, where each subject only sees one inequality level, no difference in willingness to buy between high and low inequality among those identifying themselves as Republicans. In our representative English sample, when a typical right-leaning subject is faced with two goods at different inequality levels, knowing that his choice may be played for real, he is willing to pay a premium for the less unequal good.

pay ratio fairs better on this front than the more sophisticated Gini Index and the simpler Inequality score. It is considered more informative and easier to understand by most subjects, is preferred to the alternatives and induces higher WTP. This may be because it strikes a balance between informativeness and understandability, 'connecting' better with subjects (who understand the format) whilst clearly singling out an objective, informative dimension of inequality (unlike the Inequality score, where confusion could arise as to how the score relates to on-the-ground inequality). The 2D refinement of this measure also has interesting properties—being considered more informative, potentially inducing higher WTP, and allowing more targeted consumer preferences by rendering more salient the different sources of inequality—which also make it worthy of consideration.

Finally, beyond their potential impact on policy, our findings have independent scientific interest, and suggest avenues for future research. Our sample size was designed to test the main hypothesis of generally positive WTP and is too small to provide useful insight into the demographic determinants of WTP. Similarly, it would be interesting to investigate how WTP varies across country and product type. Moreover, we have concentrated on reductions from high—but not unrealistic—inequality levels, but further research could examine WTP for inequality reductions lower down on the scale.

### 4 References

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### A Materials and methods

### A.1 Subjects

The online choice experiment was conducted in May 2020 with a total of n = 270 participants recruited on Qualtrics (an online panel provider). It used a mixed design: all subjects undertook the block of tasks for the CEO-MW format, and were randomly assigned to one of three treatment groups, which determined the other format they met. The actual number of subjects per group is shown in Table 1. Our sample size was chosen aiming for approximately 90 participants per condition to ensure satisfactory statistical power in our analyses.<sup>14</sup>

To complete the experiment, subjects had to correctly answer three sets of comprehension questions: one after the general instructions, and one after presentation of each of the inequality formats (to check comprehension of the format). This was to ensure correct understanding of the tasks, and reduce speeding.

Though we requested a 270-subject sample representative of the English population over the age of 18 (with quotas mirroring census data based on age, gender and region), Qualtrics provided us with 284 complete responses. The last 14 responses were not used in the main analysis, to keep to the pre-registered statement. A total of 795 individuals were recruited, of which 2 individuals were excluded for living outside of England, 3 for being aged under 18 years of age, and 462 (out of 790 remaining individuals; attrition rate of 58.48%) for failing to answer correctly the first comprehension check, which consisted of two basic questions checking that respondents had read through and understood the instructions (see Figure 9). Of the 328 remaining individuals, the assignments to the treatment groups and attrition rates are given in Table 2. These individuals had to answer two (further) comprehension questions, one for each inequality reporting format, which asked them to order three reports in the format in order of decreasing inequality (see Figure 10). The attrition rates are similar among the CEO-MW, GI and IS formats, though notably higher for the 2D format. This could be due to the more complex nature of the latter format, and the associated difficulty in understanding.

The socio-demographic breakdown of our subject pool is displayed in Table 3, along with the population-level breakdown. Clearly, our sample is roughly representative across these characteristics. Moreover, the political leanings and political party affinities of subjects is broken down in Table 4.<sup>15</sup> Clearly, in our sample, the left/right divide does not coincide with the Labour/ Conservatives divide, with a significant majority of those who stated affinities with Conservative party being in the Centre or Left of the political spec-

<sup>&</sup>lt;sup>14</sup>The most expensive dimension, in terms of sample size, is the between dimension for which we have 3 groups; see Appendix A.2 and Section 2.3. We conducted an *a priori* power analysis with the statistical software G\*Power 3.1: for the omnibus (fixed effects) F-test associated with the one-way ANOVA model, a standard medium effect size f = 0.25, statistical power  $1 - \beta = 0.95$  and significance level  $\alpha = 0.05$ , the required sample size is n = 252 < 270. For the two-tailed difference between two independent means t-test, a standard medium effect size d = 0.5, statistical power  $1 - \beta = 0.9$  and significance level  $\alpha = 0.05$ , the required group sample size is  $n_i = 86$  (n = 258 < 270).

<sup>&</sup>lt;sup>15</sup>Of the 12 respondents who answered "Other" to the political party question, 6 indicated being closest to the Green party.

Table 2: Attrition rate for the 2<sup>nd</sup> and 3<sup>rd</sup> rank comprehension checks (combined)

	Total	Screen.	Screen.	Total	Attrition	Freq.	Freq.
	Freq.	(C)	(T)	screen.	rate	completes	study
Inequality score	112	5	6	11	9.8%	101	95
Gini index	117	5	5	10	8.5%	107	102
2-dimensional	99	4	19	23	23.2%	76	73
Total	328	14	30	44	13.4%	284	270

*Note:* Screen. (C) corresponds to the screenouts for the CEO pay ratio comprehension check while Screen. (T) corresponds to the screenouts for the treatment specific check.

Table 3: Distribution of respondents by age, region and gender

Age	Freq.	%	(C)	Region	Freq.	%	(C)	Gender	Freq.	%	(C)
18-24	27	10.0%	11.9%	Northern England	72	26.7%	28.2%	Male	124	45.9%	49.2%
25-34	55	20.4%	17.2%	Mid England	85	31.5%	30.1%	Female	146	54.1%	50.8%
35-44	51	18.9%	17.8%	Southern England	75	27.8%	26.3%				
45-54	57	21.1%	17.5%	Greater London	38	14.1%	15.4%				
55-64	47	17.4%	14.8%								
65+	33	12.2%	20.8%								

*Note*: The (C) column corresponds to the actual breakdown of the English population retrieved from 2011 Census data (Office for National Statistics, 2013).

Table 4: Distribution of respondents by political beliefs

	Pol	Political spectrum				
Political Party	Left	Centre	Right	Total		
Conservatives	4	46	43	93		
Labour Party	68	26	1	95		
Liberal Democrats	7	23	0	30		
Other	4	8	0	12		
None	4	32	4	40		
Total	87	135	48	270		

trum.

### A.2 Stimuli and treatments

**Experimental design** The experiment began with basic socio-demographic questions asking age, region of abode and gender (Table 3). Then subjects (who were not vetted at this stage) were given instructions, and a set of comprehension questions to check that they had understood them correctly.

Individuals were randomly assigned to one of three treatment groups. Each group undertook two blocks of elicitation tasks: one for the CEO-to-median worker pay ratio inequality format (CEO-MW), and the other for a treatment-dependent alternative inequality reporting format, among the Gini index (GI), an Inequality score on a 5-letter scale (IS), and a 2-dimensional report specifying the CEO-to-Minimum wage and Median-to-Minimum wage ratios (2D). At the beginning of each block the inequality format used was explained, and subjects had two attempts to complete a comprehension question concerning it before proceeding. Each block involved the elicitation of three WTPs. Each was the WTP for the reduction in inequality from a benchmark very high inequality level, with a towel set

	CEO-to-median	Gini Index	CEO-MW & Median-MW	A-E scale		
VH vs. L	750:1 vs. 5:1	0.55 vs. 0.15	300:1; 1:3 vs. 30:1; 3:1	E vs. A		
VH vs. M	750:1 vs. 50:1	0.55 vs. 0.25	300:1; 1:3 vs. 300:1; 3:1	E vs. B		
VH vs. H	750:1 vs. 250:1	0.55 vs. 0.45	300:1; 1:3 vs. 30:1; 1:3	E vs. D		
<i>Note:</i> VH stands for very high H for high M for medium and L for low						

Table 5: Summary of inequality level reductions used in the experiment

*Note*: VH stands for very high, H for high, M for medium and L for low.

priced at  $\pounds 30$  to a lower inequality level. The inequality levels used and inequality reductions elicited are reported in Tables 1 and 5.16 The order of blocks was randomised for each subject, as was the order of elicitations within each block.

After completing these tasks, subjects were asked first a set of feedback questions, concerning which of the two formats experienced they found more understandable, more informative, which they preferred, and whether they would use inequality information, if provided, when shopping. Then they were asked survey questions concerning their opinions on whether income differences are too large in the UK, whether it is the government's responsibility to reduce it, and whether high-income people deserve their income. Finally, they completed a set of standard socio-demographic questions, drawn from census studies, asking for their level of education, employment status, affinity to political parties, political leaning and pre-tax household income.

Screenshots with instructions and comprehension questions, as well as details of the end-of-study survey questions, are given in Appendix C.

**Inequality levels** We set the CEO-MW inequality levels used in the experiment relying on the ISPP 2009 data on 'ideal' CEO and median worker pay (analysed by Kiatpongsan and Norton 2014), the distribution of CEO-to-median pay ratios of the 265 companies in the Consumer Discretionary category of the AFL-CIO (2020) data set (relevant for the textile industry), the 2054 Russell 3000 companies in the entire AFL-CIO (2020) data set, as well as the CEO-to-average pay ratios of 99 FTSE 100 companies in the CIPD (2020) data set (see Table 6).<sup>17</sup> Our very high inequality 'benchmark' level in the CEO-MW format, 750:1, corresponds to the 86th percentile of companies in the Consumer Discretionary industry and the 97th percentile of all companies in the AFL-CIO sample. The low level, 5:1, corresponds to the 'ideal' CEO-MW in the ISSP 2009 data: the median ideal CEO-median worker pay ratio is 5:1 in the UK sample (n = 808, ISSP Research Group 2017; it is 7:1 in the US sample; n = 1,378). It corresponds to the 9th percentile of all companies in the AFL-CIO sample. Our intermediate inequality levels were selected to span the range of percentiles, whilst being multiples of 10 and dividers of 750. The medium level, 50:1, is located below the first quartile for the Consumer Discretionary group and between the first quartile and the median for both the entire US and UK sample, whereas the high level, 250:1, is located between the

<sup>&</sup>lt;sup>16</sup>Recall from the Introduction that under the 2D format the intermediate levels are not unequivocally ordered by inequality (see Table 1; the H, M coding is introduced in Table 5 for expository purposes.

<sup>&</sup>lt;sup>17</sup>Although CEO-to-average and CEO-to-median pay ratios are not directly comparable (with the mean employee pay often above the median employee pay), we also consider the CIPD UK data set since the study is run in the UK where CEOs of large corporations tend to be paid less than their US counterparts.

	CEO-to-median p	ay ratio	CEO-to-average pay ratio	
	(AFL-CIO, US com	(AFL-CIO, US companies)		
	Consumer Discretionary	All industries	FTSE 100	
Min	1:1	1:1	12:1	
10th Percentile	45:1	19:1	28:1	
25th Percentile	80:1	39:1	40:1	
Median	194:1	80:1	72:1	
75th Percentile	481:1	164:1	138:1	
90th Percentile	917:1	324:1	301:1	
Max	40668:1	40668:1	956:1	
Observations	2065	2054	99	

Table 6: Distribution of pay ratios for publicly listed companies (FYE2018)

Source: AFL-CIO (2020) & CIPD (2020).

median and the third quartile for the *Consumer Discretionary* group and between the third quartile and the 90th percentile for the entire US and UK sample.

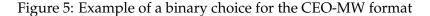
Every effort was made to calibrate the inequality levels under the other formats with those set for the CEO-MW. As noted in the Introduction, Gini indices are frequently used to measure country-level income inequality, though significantly less so for firm-level inequality. The inequality levels under the GI used here (i.e. 0.15, 0.25, 0.45 and 0.55) were thus based on the distribution of Gini indices at the country level (World Bank, 2020) which range from 0.24 for Slovenia (in 2017) to 0.63 for South African (in 2014)-mirroring the percentile rank of our CEO-MW ratio levels, as well as the few data points we could find on the GI at company level.<sup>18</sup> For the Inequality Score, we assigned "A" to reflect the 'ideal' CEO-MW of 5:1, and "E" to mirror the very high level of 750:1. On the basis of the location of the CEO-MW levels with respect to the median (Table 6), we assigned a value of "D" to roughly correspond to the 250:1 level, and a value of "B" for the 50:1 level. The calibration in the case of the 2D CEO-to-minimum wage / Median-to-minimum wage ratio is facilitated by the fact that the CEO-MW value can be derived from the 2D one; these translations are given in Table 7. Clearly, the very high and low inequality levels under the 2D format correspond to CEO-median worker pay ratios that are comparable to the corresponding levels under the CEO-MW formats. The choice of 1:3 median-to-minimum wage ratio for the very high level is based on data from the Consumer Discretionary dataset AFL-CIO (2020), according to which 16 companies (6%) have a median-to-(UK) minimum wage ratio smaller than or equal to 1:3.<sup>19</sup> The intermediate 2D levels were chosen such that, for each of them, only one of up-side vs. down-side inequality differs with respect to high and low 2D levels, and so that their corresponding CEO-MW levels are comparable.

<sup>&</sup>lt;sup>18</sup>Specifically, Morais and Kakabadse (2014), the only study we could find reporting company-level Gini index, report the "Corporate Gini index" for a multi-national retail company as ranging from 0.16 to 0.25 whereas the CEO-MW ranged from 55:1 to 71:1. Data concerning a software company which implements the policy of making the pay of all its employees publicly available indicate a GI of 0.16 and CEO-MW of 2:1.

<sup>&</sup>lt;sup>19</sup>The 2019 UK minimum hourly wage is £8.21. Using the US minimum wage of \$7.25, 5 companies have a median-to-minimum wage ratio smaller or equal to 1:3.

Inequality	Up-side inequality /	CEO-to-Min Wage;	Corresponding
level	Down-side inequality	Median-to-Min Wage	CEO-MW
Very high	(High, High)	300:1; 1:3	900:1
	(Low, High)	30:1; 1:3	90:1
	(High, Low)	300:1; 3:1	100:1
Low	(Low, Low)	30:1; 3:1	10:1

Table 7: Summary of the 2-dimensional inequality levels





#### A.3 Elicitation technique

To elicit individuals' willingness to pay for reduced inequality, we elicit indifference points using a bisection method inspired from Abdellaoui et al. (2008); Bostic et al. (1990). This discrete-choice chained elicitation method presents individuals with a series of binarychoice questions, where the options faced in subsequent choices depend on subjects' previous responses.

Participants were told to imagine that they are online shopping for towels, and have a fixed budget of £50. Each choice question involves two suitable offers for a 6-piece white cotton towel set from two different, anonymous online home retailers. For each towel set, they were only given the price and an indication of the inequality level among employees of the company producing and selling the product and asked to choose the towel set they wished to buy. A typical question (for the CEO-MW format) is shown in Figure 5.

For the benchmark price and inequality level ( $price_B$ ,  $inequ_B$ ) and each inequality level  $inequ_n$  (see Table 1), we elicited the indifference point: the price  $price_n$  such that the subject was indifferent between a towel set with ( $price_B$ ,  $inequ_B$ ) and one with ( $price_n$ ,  $inequ_n$ ). This was done through a chained sequence of binary-choice questions between a towel set with

fixed inequality and price (*price<sub>B</sub>*, *inequ<sub>B</sub>*) and towel sets with (*price<sub>i</sub>*, *inequ<sub>n</sub>*), where the inequality remains fixed and the price varies across questions. The benchmark  $price_B$  was set at £30; while *price<sub>i</sub>*, initially set at £30, varied in increments, with a lower bound of £10 and an upper bound of £60. The first two binary choices in each sequence, for  $price_i = £30$ , £40, were the same for all participants. Subsequent binary choices followed the logic of the bisection process, with the varying parameter  $(price_i)$  determined by previous choices. It was designed such that  $price_{i+1} > price_i$  (resp.  $price_{i+1} < price_i$ ) if the  $(price_i, inequ_n)$  good was chosen (resp. not chosen) in the previous question. More specifically, let price be the largest  $price_i$  such that  $(price_i, inequ_n)$  is chosen over  $(price_B, inequ_B)$  in some choice (and set it at  $-\infty$  if there is no such choice), and  $\overline{price}$  be the smallest price<sub>i</sub> such that (price<sub>B</sub>, *inequ*<sub>B</sub>) is chosen over (*price<sub>i'</sub>*, *inequ*<sub>n</sub>) in some choice (and set it at  $\infty$  if there is no such choice). It follows that the subject's indifferent point lies in the interval [price, price]. At each stage in the sequence, if the interval thus defined on the basis of previous choices did not stretch to  $\infty$  or  $-\infty$ , the next question involved the mid-point price  $\frac{1}{2}(\overline{price} - price)$ (so, at the subsequent stage, the size of the interval was halved). If there were no choices in which the subject has chosen (*price<sub>B</sub>*, *inequ<sub>B</sub>*) (so  $price = \infty$ ), the subsequent choice involved the price £10 higher than the largest price yet faced by the subject; and similarly for  $price = -\infty$ . The procedure stopped when the width of the interval [*price*, *price*] was at most £1.00 or when the limit of the range for *price<sub>i</sub>* was reached; it was designed such that there were at most 7 binary decisions.

At the end, the indifference point  $price_n$  was taken to be the midpoint of the interval  $[\underline{price}, \overline{price}]$  if it did not stretch beyond the £10–£60 range, and the boundary point reached if it did. The WTP for the reduction in inequality from  $inequ_B$  to  $inequ_n$  is  $price_n - price_B$ . Note that our elicitation only situates the indifference price in the interval  $[\underline{price}, \overline{price}]$ , so the most conservative estimate for this price (in the context of this study, which is focused on the possibility of positive WTP) is  $\underline{price}$ . Hence we define the lowest possible WTP coherent with the subject's choices,  $WTP_{min} = \underline{price} - price_B$ .<sup>20</sup> We use  $WTP_{min}$  in some of the tests of the positivity of WTP, to guarantee that results are not driven by the arbitrary choice of the midpoint of  $[price, \overline{price}]$  as our indifference point.

#### A.4 Incentivisation

Participants were paid £2 (roughly \$2.50) for participation.<sup>21</sup> Moreover, we implemented a random incentive mechanism to ensure incentive compatibility, i.e. that it is in participants' best interests to answer truthfully. At the beginning of the experiment, participants were informed that they all had an equal, greater than 1-in-100 chance of being selected to receive the £50 budget and have one of their purchasing decisions played for real (see Figure 8, Appendix C). Remuneration or 'playing for real' involved on the one hand, the participant being sent a towel set that is sold at the price and by a company whose inequal-

<sup>&</sup>lt;sup>20</sup>In the case where  $\underline{price} = -\infty$ ,  $WTP_{min}$  is set at -20, corresponding to the lower bound of the price range, £10.

<sup>&</sup>lt;sup>21</sup>Since the experiment took on average less than 15 minutes, this corresponds to an hourly pay of over £8, which is in line with the UK National Living wage which stands at £8.72 as of April 2020.

ity across the workforce is as specified in the option they chose in the selected purchasing decision. On the other hand, they were sent, as change, the difference between £50 and the price of the towel set they selected. As for the purchasing decision that would be played, there were only told that it would be automatically selected by the program, and given no further information. After data collection, we randomly selected 3 subjects (out of 270). They were each remunerated according to their choice in the same question, namely that in which they chose between a towel set with inequality 750:1 on the CEO-MW scale and price £30 versus a towel set with inequality 5:1 and price £40. Note that all subjects faced this question: firstly, because they all undertook the CEO-MW format block, and secondly, because the bisection procedure was designed such that all subjects faced the £40 price point as their second question (Appendix A.3).

This specific random incentive mechanism ensured that subjects were in complete ignorance about the purchasing decision that would be played for real (if they were selected); it was thus in their interests to answer truthfully in each binary choice they faced.<sup>22</sup> It did so whilst allowing us to remunerate according to the same choice for all subjects. This was key to tackling the central challenge to incentive-compatible elicitation in this context, namely the difficulty in finding products whose inequality in production and price match those in the choice questions faced by subjects. For each reporting format, the cohort could face over 20 different prices for each of three different inequality levels: and it is practically impossible to find, for each price and inequality level, a company with that level of inequality selling a good of a fixed type at that price. And this is not even counting the fact that, whilst data is available on (public) companies' inequality on the CEO-MW or 2D indices, it is very difficult to obtain the data required to calculate a GI for most companies.

As concerns the decision that was 'played for real', we selected two companies providing towel sets with prices and inequality across the workforce roughly matching those in the choice question. In practice, this experimental design choice was made in conjunction with the choice of the product type used. To avoid confounding factors, the product should have as little differentiation as possible (e.g. in brand and characteristics) across companies, it should provide utility to most (if not all) respondents, and it should be shippable to the UK. Moreover, because the data for inequality calculation in the CEO-MW format is available only for listed companies,<sup>23</sup> we restricted search to those. Finally, we wanted the low inequality company to be in the range of 'ideal' ratios from respondents in the ISSP surveys (Appendix A.2). Following Mohan et al. (2015), who used a towel set, we thus used a 6-piece white cotton towel set in the experiment, and drawing on AFL-CIO (2020) for inequality levels (see Appendix A.2), we selected two companies active in the UK offering such towel sets with the prices and inequality levels given in Table 8.<sup>24</sup> As is clear from the table, the values 'played for real' correspond roughly to those involved in

<sup>&</sup>lt;sup>22</sup>Specifically, given their ignorance, they could not rule out any of the choices as being possibly played for real, and hence their weakly dominant strategy was to answer truthfully.

<sup>&</sup>lt;sup>23</sup>See footnote 5.

<sup>&</sup>lt;sup>24</sup>We cross-checked the AFL-CIO (2020) figures with companies' official 2019 proxy statements (for FYE2018), as provided by the SEC (sec.gov). The prices were those stated on the company websites, from which the towel sets were bought.

Product	Used for ren	nuneration	Choice question		
Product	Inequality	nequality Price		Price	
1	785:1	£29.43	750:1	£30	
2	2:1 (CEO) 6:1 (CFO)	£37.99	5:1	£40	

Table 8: Inequality and price for 6-piece white cotton towel set used for remuneration of subjects. Inequality is given in the CEO-MW ratio, though for the second product, we also give the ratio of the CFO-median worker pay ratio, the CFO being the highest paid employee.

the purchasing decision in the experiment.

### A.5 Pre-registration

The study was pre-registered on the Open Science platform, at the following address: https://osf.io/vsk39. For the sake of completeness, we reproduce our pre-registered hypotheses below. They are clearly discussed in Section 2.

**Hypothesis 1.** *There is a positive willingness to pay for a significant reduction in inequality under at least one inequality reporting format, other product characteristics being kept equal.* 

**Hypothesis 2.** It is possible to trace a curve of WTP for the reduction of inequality from a fixed high "benchmark" level to a given lower level. This curve is increasing in the extent of inequality reduction (though perhaps not strictly so).

#### Hypothesis 3.

Hypothesis 3A. The dependency of WTP on inequality is stronger for simpler reporting formats, other characteristics being equal. So, among numerical formats, it is stronger for the CEO-to-median pay ratio than the Gini index.

Hypothesis 3B. The dependency of WTP on inequality is stronger for reporting formats than can be directly related to moral or social intuitions, other characteristics being equal. So, among numerical formats, it is stronger for the CEO-to-median pay ratio than the inequality score on a 5-letter scale.

Hypothesis 3C. The dependency of WTP on inequality may depend on the extent to which it is driven by up-side inequality (particularly high pay for high-paid workers) or down-side inequality (particularly low pay for low-paid workers), other characteristics being equal. So, for instance, the WTP to reduce a median-minimum wage size is greater than the WTP to reduce the CEO-minimum wage by a comparable amount.

**Hypothesis 4.** *WTP is greater among people who consider themselves on the left of the political spectrum compared to those on the right.* 

Inequality	CEO-to-median	Inequality score	Gini index	2-dimensional
reduction	WTP (in £)	WTP (in £)	WTP (in $\pounds$ )	WTP (in £)
Large (VH vs. L)				
Average	13.36	9.54	10.88	16.23
Q1	4.10	1.60	2.20	5.95
Median	12.20	7.85	9.10	15.95
Q3	24.70	20.33	20.33	29.38
Medium (VH vs. M)				
Average	12.27	8.65	8.54	14.70
Q1	2.85	0.35	0.95	5.35
Median	10.33	5.95	5.95	12.83
Q3	20.33	15.95	15.33	23.45
Small (VH vs. H)				
Average	10.74	6.27	6.27	12.69
Q1	2.20	0.35	0.95	4.70
Median	7.20	4.10	4.10	10.33
Q3	19.08	10.95	10.33	22.20
Sample size (n)	270	95	102	73

Table 9: Summary statistics: WTP for reduced inequality across reporting formats and levels of reduced inequality

## **B** Supplementary Results

#### B.1 Willingness to pay: descriptive statistics and basic tests

Summary statistics for WTP across all reporting formats and inequality levels is given in Table 9.

**WTP: tests for positivity** Our main research question concerns the extent to which WTP is positive. We can say for sure that an individual's WTP is positive for *inequ<sub>n</sub>* whenever there exists *price* > *price<sub>B</sub>* such that (*price*, *inequ<sub>n</sub>*) is preferred to (*price<sub>B</sub>*, *inequ<sub>B</sub>*) for *inequ<sub>n</sub>* < *inequ<sub>B</sub>* i.e. whenever the lowest possible WTP coherent with the subject's choices,  $WTP_{min}$ , is positive (Appendix A.3). For each inequality format and inequality level *inequ<sub>n</sub>*, Table 10 reports proportions of strictly positive  $WTP_{min}$  and Binomial tests of the null hypothesis that the probability of strictly positive  $WTP_{min}$  is 0.5. Table 11 reports, for each inequality format, two-sided one sample t-tests with null hypothesis that WTP (respectively  $WTP_{min}$ ) equals 0. The results in that Table, statistically significant at all standard levels, also hold for all levels of reduced inequality and with nonparametric Wilcoxon signed-rank tests.

**WTP and income** Figure 6 displays violin plots for the WTP for various inequality reductions under the CEO-MW format, across three categories of stated, pre-tax household income. All means, medians and most 25% quantiles are positive, across all income categories and inequality reductions.

Inequality	CEO-to-median	Inequality score	Gini index	2-dimensional		
reduction	Observed	proportion with st	rictly positive	$WTP_{min}$		
VH vs. L	0.859***	0.768***	0.814***	0.849***		
VH vs. M	0.848***	0.747***	0.765***	0.863***		
VH vs. H	0.815***	0.695***	0.755***	0.808***		
Sample size (n) 270 95 102 73						
Note: * $p < 0.05$ , ** $p < 0.01$ , *** $p < 0.001$ .						

Table 10: One-sided Binomial tests across reporting formats and levels of reduced inequality

Table 11: One-sample (two-sided) t-tests of WTP for the largest reduction in inequality

	CEO-to-median	Inequality score	Gini index	2-dimensional	
WTP	13.36***	9.54***	10.88***	16.23***	
	(0.668)	(1.31)	(1.06)	(1.34)	
$WTP_{min}$	13.05***	9.24***	10.58***	15.95***	
	(0.670)	(1.31)	(1.06)	(1.35)	
Sample size (n)	270	95	102	73	
<i>Note</i> : * $p < 0.05$ , ** $p < 0.01$ , *** $p < 0.001$ . Standard errors in brackets.					

WTP and stated future use of inequality information Table 12 gives the statistics on

the stated future use of inequality information. Table 13 displays regressions of the WTP

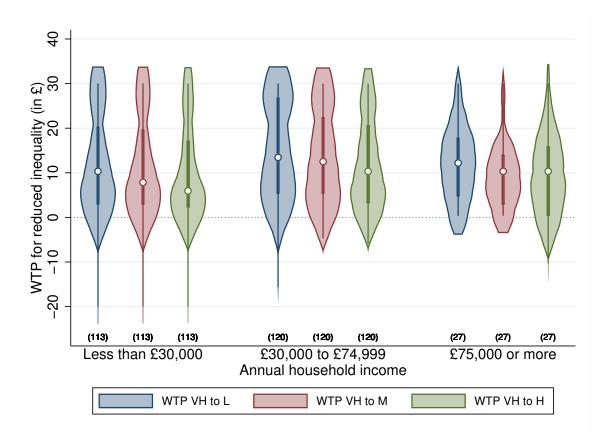


Figure 6: Distribution of WTP for the each reduction in inequality (CEO-MW format) over income category (using Epanechnikov kernel function).

	Stated future use		
	n	%	
Definitely yes	78	28.9%	
Probably yes	104	38.5%	
Might or might not	50	18.5%	
Probably not	30	11.1%	
Definitely not	8	3.0%	
Total	270	100%	

Table 12: Distribution of respondents by stated future use

Table 13: WTP for largest reduction in inequality and stated future use

	WTP	WTP	WTP	Avg. WTP
	CEO-median	Ineq. score	Gini index	2-dimensional
	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE
Stated future use (b	aseline: Definite	ely yes)		
Probably yes	-7.011***	1.582	$-8.983^{***}$	-4.053
	(1.399)	(3.128)	(2.358)	(2.944)
Might or might not	$-13.34^{***}$	-6.176	$-13.90^{***}$	$-12.55^{***}$
	(1.692)	(3.725)	(2.886)	(3.474)
Probably not	$-16.02^{***}$	-5.214	$-12.09^{**}$	$-14.66^{***}$
	(2.007)	(4.201)	(3.674)	(4.021)
Definitely not	$-18.40^{***}$	$-14.89^{+}$	$-22.54^{***}$	$-18.62^{*}$
	(3.468)	(7.494)	(5.755)	(7.505)
Constant	20.85***	11.25***	19.34***	22.40***
	(1.058)	(2.194)	(1.918)	(2.166)
Observations	270	95	102	73
R-squared	0.286	0.094	0.260	0.261
Prob > F	0.000	0.062	0.000	0.000

*Note*: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Robust standard errors in brackets.

for the largest inequality reduction against stated future use, under each of the reporting formats.

#### **B.2** WTP and size of inequality reduction

Table 14 gives the results of regressions of WTP against the inequality level, recoded as two dummy variables—one for the very high vs. low level (i.e. VH vs. L), and one for the very high vs. high level (i.e. VH vs. H)—with very high vs. medium (i.e. VH to M) as the baseline level (see Table 5). For the one-dimensional inequality reporting formats, WTP is increasing in inequality reduction if the coefficient estimate of the first dummy is positive and that of the second is negative. This is clearly the typical finding for most of these formats. (Note that, in the case of the IS format, the corresponding one-way repeated measure ANOVA rejects the null hypothesis of equal WTP across all inequality reductions: F(2, 188) = 9.13, p < 0.001.) In the 2D format by contrast, the intermediate inequality levels are not comparable (see Introduction and Table 1); hence the corresponding 'VH vs. H' coefficient in Table 14 cannot be associated to an unequivocal direction (increase or decrease) of inequality change. Only the other coefficients can speak to the question of Table 14: WTP across levels of inequality reduction using pooled OLS with clustered standard errors

	(1)	(2)	(3)	(4)
	CEO-to-median	Inequality score	Gini index	2-dimensional
	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE
VH vs. L	1.086***	$0.884^{+}$	2.341***	1.523***
	(0.202)	(0.523)	(0.622)	(0.399)
VH vs. H	$-1.527^{***}$	-2.381**	$-2.264^{***}$	$-2.011^{*}$
	(0.260)	(0.862)	(0.568)	(0.902)
Constant	12.27***	8.652***	8.537***	14.70***
	(0.642)	(1.263)	(0.997)	(1.280)
Observations	810	285	306	219
Clusters	270	95	102	73
$R^2$	0.010	0.014	0.036	0.017
F	32.952	6.150	19.965	12.769
Prob > F	0.000	0.003	0.000	0.000

$$WTP_{ij} = \beta_0 + \beta_1 \times \mathbb{1}_{VH \to L\,j} + \beta_2 \times \mathbb{1}_{VH \to H\,j} + u_{ij}$$

*Note*: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Clustered standard errors in brackets.

whether WTP is increasing in the extent of inequality reduction under this format.

Under the one-dimensional reporting formats, for each pair of adjacent inequality levels  $inequ_i$ ,  $inequ_j$ ,  $i, j \in \{B, H, M, L\}$  with *i* involving higher inequality than *j*, the (average) slope of the WTP curve between these levels is  $\frac{inequ_j - inequ_i}{d_{i,j}}$ , where  $d_{i,j}$  is the distance between the levels  $inequ_i$ ,  $inequ_i$  in the relevant inequality format. The latter is the difference between the CEO-median worker pay ratios under the CEO-MW format $d_{B,H} = 750 - 250 = 500, d_{H,M} = 200, d_{M,L} = 45$ —the difference between the indices in the GI format—e.g.  $d_{B,H} = 0.55 - 0.45 = 0.1$ —and difference in grades in the scale in the IS format—e.g.  $d_{B,H} = d_{M,L} = 1$ . Table 15 reports regressions of the slope of the WTP curve against inequality levels. The latter are recoded as two dummy variables—one for the low-medium range (i.e. L-to-M), and one for the high to very high range (i.e. H-to-VH)—with medium to high range (i.e. M-to-H) as the baseline level. Significant positive coefficients on these dummies indicate that the WTP curve is steeper on the corresponding region than in the M-to-H range. For example, the significant positive coefficients on the H-to-VH range across reporting formats indicates that the WTP curve is steeper on the higher end of the inequality range—or equivalently, in the region of smaller reductions in inequality from the 'benchmark' very high level.

### **B.3** WTP and inequality reporting formats

Table 16 reports the counts of higher, equal or lower WTP under the CEO-MW format as compared to other formats, across all comparable levels of inequality reduction.

Table 15: Regression of slopes across inequality levels using pooled OLS with clustered standard errors

	CEO-to-median	Inequality score	Gini index
Constant	$0.0076^{***}$	1.1906**	11.3181***
	(0.0013)	(0.4308)	(2.8402)
H-to-VH	$0.0139^{***}$	$5.0805^{***}$	$51.4152^{***}$
	(0.0019)	(1.1832)	(8.9670)
L-to-M	$0.0165^{***}$	-0.3062	12.0956
	(0.0047)	(0.7289)	(7.4500)
$\mathbb{R}^2$	0.0244	0.1121	0.1093
Adj. $\mathbb{R}^2$	0.0219	0.1058	0.1035
Observations	810	285	306
Clusters	270	95	102
F	27.26	11.09	16.76
Prob > F	0.000	0.000	0.000

 $Slope_{ij} = \beta_0 + \beta_1 \times \mathbb{1}_{L-M j} + \beta_2 \times \mathbb{1}_{H-VH j} + u_{ij}$ 

\*\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05

Table 16: Number of subjects with WTP under CEO-MW greater than, equal to or less than WTP under other formats, across levels of inequality reduction.

Inequality         WTP: CEO-MW vs. IS           reduction         # CEO-MW higher         # Equal         # CEO-MW lower         Total           VH vs. L         49         34         12         95           VH vs. M         45         32         18         95           VH vs. H         52         28         15         95           WTP: CEO-MW vs. GI           # CEO-MW higher         # Equal         # CEO-MW lower         Total           VH vs. L         39         44         19         102           VH vs. M         455         37         20         102           VH vs. H         56         31         15         102				
VH vs. L       49       34       12       95         VH vs. M       45       32       18       95         VH vs. H       52       28       15       95         WTP: CEO-MW vs. GI         # CEO-MW higher       # Equal       # CEO-MW lower       Total         VH vs. L       39       44       19       102         VH vs. M       45       37       20       102         VH vs. H       56       31       15       102				
VH vs. M       45       32       18       95         VH vs. H       52       28       15       95         WTP: CEO-MW vs. GI         # CEO-MW higher       # Equal       # CEO-MW lower       Total         VH vs. L       39       44       19       102         VH vs. M       45       37       20       102         VH vs. H       56       31       15       102				
VH vs. H         52         28         15         95           WTP: CEO-MW vs. GI           # CEO-MW higher         # Equal         # CEO-MW lower         Total           VH vs. L         39         44         19         102           VH vs. M         45         37         20         102           VH vs. H         56         31         15         102				
WTP: CEO-MW vs. GI           # CEO-MW higher         # Equal         # CEO-MW lower         Total           VH vs. L         39         44         19         102           VH vs. M         45         37         20         102           VH vs. H         56         31         15         102				
# CEO-MW higher# Equal# CEO-MW lowerTotalVH vs. L394419102VH vs. M453720102VH vs. H563115102				
VH vs. L394419102VH vs. M453720102VH vs. H563115102				
VH vs. M         45         37         20         102           VH vs. H         56         31         15         102				
VH vs. H         56         31         15         102				
WTP: CEO-MW vs. 2D				
# CEO-MW higher # Equal # CEO-MW lower Total				
VH vs. L         14         34         25         73				

### **B.4** Opinions about the reporting formats

Table 17 reports descriptive statistics for the feedback questions concerning the reporting formats. Recall that subjects were asked which (between the two formats they had been presented with) was more informative, easier to understand, and preferred for income inequality reporting (Appendices A.2 and C).

	Most informative		Easiest to understand		Preferred	
	n	%	n	%	n	%
Inequality score cohort						
CEO pay ratio	65	68.42	64	67.37	65	68.42
Inequality score	13	13.68	17	17.89	13	13.68
The Same / Indifferent	17	17.89	14	14.74	17	17.89
Gini index cohort						
CEO pay ratio	63	61.76	74	72.55	68	66.67
Gini index	19	18.63	8	7.84	21	20.59
The Same / Indifferent	20	19.61	20	19.61	13	12.75
2-dimensional cohort						
CEO pay ratio	17	23.29	36	49.32	16	21.92
2-dimensional measure	43	58.90	21	28.77	43	59.80
The Same / Indifferent	13	17.81	16	21.92	14	19.18

Table 17: Distribution of opinions about the inequality reporting formats

Table 18: Sample means and one-sample t-tests of *WTP<sub>min</sub>* by political ideology

	CEO-to-media	n pay ratio (aver	rage $WTP_{min}$ in £)	Observations
	750:1 vs. 250:1	750:1 vs. 50:1	750:1 vs. 5:1	(Total = 270)
Left	10.92***	13.56***	15.50***	87
	(1.07)	(1.12)	(1.17)	
Centre	11.11***	12.42***	13.14***	135
	(0.96)	(0.95)	(0.99)	
Right	7.68***	7.83***	8.35***	48
	(1.21)	(1.22)	(1.16)	
Labour Party	10.38***	12.62***	14.03***	95
	(1.08)	(1.13)	(1.20)	
Liberal Democrats	10.20***	10.20*** 11.82***		30
	(1.82)	(1.91)	(2.02)	
Conservatives	9.32***	10.06***	10.75***	93
	(1.03)	(1.00)	(1.02)	
Other	14.13***	15.00***	17.51***	12
	(3.20)	(3.36)	(2.95)	
None	12.27***	14.07***	15.05***	40
	(1.75)	(1.76)	(1.83)	

*Note*: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Standard errors in brackets.

#### **B.5** WTP and Political Leanings

Table 18 reports the sample averages and *t*-tests for  $WTP_{min}$  (the most conservative estimate of WTP coherent with subjects' choices; Appendix A.3) equal to zero under CEO-MW for various inequality reductions, political leanings and affinity to political parties. The results in that Table, statistically significant at all standard levels, also hold for nonparametric Wilcoxon signed-rank tests. Table 19 reports the same analyses and tests for WTP under the other formats, across inequality reductions and political leanings.

Table 20 reports a regression of WTP for a given level of inequality reduction (dependent variable) against the political leaning (with 'Centre' as baseline) and inequality level (with 'M' as baseline). The significant negative coefficient for the Right dummy suggests

	Ineau	ality Score (average WT	P  in  f	Observations
	E vs. D	E vs. B	E vs. A	(Total = 95)
Left	4.47**	7.99**	9.77***	31
Lett				51
<b>C</b> 1	(1.54)	(2.23)	(2.21)	4 🗖
Centre	7.37***	8.34***	9.21***	45
	(1.73)	(1.96)	(2.03)	
Right	6.62**	10.46***	9.92**	19
	(2.04)	(2.29)	(2.73)	
	Gi	ni index (average WTP in	n £)	Observations
	0.55 vs. 0.45	0.55 vs. 0.25	0.55 vs. 0.15	(Total = 102)
Left	8.85***	10.07***	13.31***	33
	(1.45)	(1.91)	(1.87)	
Centre	6.06***	8.62***	10.69***	48
	(1.34)	(1.53)	(1.66)	
Right	2.72* 5.93***		7.50***	21
	(1.08)	(1.41)	(1.72)	
	2-dir	nensional (average WTP	' in £)	Observations
	300:1; 1:3 vs. 30:1; 1:3	300:1; 1:3 vs. 300:1; 3:1	300:1; 1:3 vs. 30:1; 3:1	(Total = 73)
Left	15.23***	17.79***	20.23***	23
	(2.23)	(2.15)	(2.24)	
Centre	12.06***	14.22***	15.51***	42
	(1.83)	(1.71)	(1.79)	
Right	8.50*	8.34*	8.74*	8
	(3.24)	(3.27)	(3.19)	

Table 19: Sample means and one-sample t-tests of *WTP* by political ideology for IS, GI and 2D formats

*Note:* \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Standard errors in brackets.

that the WTP among those with Right political leanings is significantly lower than for those at the Centre of the spectrum, though no significant difference was detected between Left and Centre cohorts. Moreover, whilst those in the Centre have WTP that is increasing with the extent of inequality reduction (as evidenced by the significant positive, resp. negative values for the coefficients for the inequality reduction dummies), the WTP is more increasing on the Left (as evidenced by the significant interaction terms). On the other hand, though the coefficients for the Right suggest that it is more slowly increasing (they have opposite signs to the inequality reduction dummies), if increasing at all, none are significant. Table 21 reports the general regression in Table 14 conducted at the level of each position in the political spectrum, and among the supporters of each of the two main English parties. Whilst it confirms that the WTP curve is increasing for subjects on the Left and Centre of the political spectrum, it fails to find statistically significant differences between WTPs for different amounts of inequality reduction among individuals who identify with the Right. Indeed, the corresponding one-way repeated measures ANOVA of WTP against inequality reduction among individuals who identify with the Right fails to reject the null hypothesis of no effect of inequality reduction (F(2, 94) = 0.59, p = 0.56). We thus fail to find evidence that WTPs are strictly increasing in the magnitude of the inequality

Table 20: Pooled OLS regression of WTP for reduced inequality against political belief and inequality reduction for the CEO-MW format, with clustered Standard Errors.

$$\beta_0 + \beta_1 \times \mathbb{1}_{\operatorname{Left} i} + \beta_2 \times \mathbb{1}_{\operatorname{Right} i} + \beta_3 \times \mathbb{1}_{VH \to L j} + \beta_4 \times \mathbb{1}_{VH \to H j}$$

 $WTP_{ij} = +\beta_5 \times \mathbb{1}_{\text{Left}\,i} \times \mathbb{1}_{VH \to L\,j} + \beta_6 \times \mathbb{1}_{\text{Left}\,i} \times \mathbb{1}_{VH \to H\,j}$ 

 $+\beta_7 \times \mathbb{1}_{\operatorname{Right} i} \times \mathbb{1}_{VH \to Lj} + \beta_8 \times \mathbb{1}_{\operatorname{Right} i} \times \mathbb{1}_{VH \to Hj} + u_{ij}$ 

	$\beta$ / SE
Left	1.115
	(1.466) -
Right	$-4.576^{**}$
	(1.536)
VH vs. L	0.722**
	(0.249)
VH vs. H	$-1.318^{***}$
	(0.302)
Left $\times$ VH vs. L	1.244**
	(0.476)
Left $\times$ VH vs. H	$-1.296^{*}$
	(0.595)
Right $ imes$ VH vs. L	-0.209
	(0.539)
Right $\times$ VH vs. H	1.174
	(0.754)
Constant	12.72***
	(0.949)
Observations	810
Clusters	270
F	10.85
Prob > F	0.0000

*Note*: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Clustered standard errors in brackets.

reduction for those on the right of the political spectrum.

Across those associated with two main political parties—Labour (on the left) and Conservatives (on the right)—there is evidence for positive WTP and increasing WTP with inequality reduction, though the WTP seems higher and the evidence for and size of the increasing effect is stronger for those with affinities to Labour. Despite mean WTP being smaller for the 'Conservatives' cohort than for the 'Labour' cohort for all inequality reductions (Table 18), this difference is only statistically significant for the largest reduction in inequality (F(1, 186) = 4.31, p = 0.04).

### **B.6 WTP and Attitudes to Income Inequality**

Descriptive statistics for attitudes to income inequality, as elicited in end-of-experiment survey questions (Appendices A.2 and C), are given in Table 22. Our cohort is largely coherent with typical survey findings that around 80% of Britons think that the gap between those with high incomes and those with low incomes is too large, and that around 65%

Table 21: Regressions of WTP across inequality levels for the CEO-MW format, among sub-samples of subjects with various political leanings and affinities to political parties. (Each regression is as set out in Table 14.)

	Left Centre Right I		Labour	Conservatives	
	$\beta$ / SE	eta / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE
VH vs. L	1.967***	0.722**	0.513	1.433***	0.704*
	(0.407)	(0.249)	(0.483)	(0.343)	(0.324)
VH vs. H	$-2.613^{***}$	$-1.318^{***}$	-0.144	-2.222***	$-0.743^{**}$
	(0.514)	(0.302)	(0.699)	(0.466)	(0.255)
Constant	13.84***	12.72***	8.148***	12.90***	10.37***
	(1.120)	(0.948)	(1.221)	(1.128)	(1.002)
Observations	261	405	144	285	279
Clusters	87	135	48	95	93
$R^2$	0.0319	0.0057	0.0012	0.0185	0.0037
F	23.45	15.06	0.72	17.85	7.41
Prob > F	0.0000	0.0000	0.4933	0.0000	0.0010

*Note*: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Clustered standard errors in brackets.

Table 22: Attitudes to	o income	inequality	: descrip	otive statisics

			Strongly	Somewhat	Neither agree	Somewhat	Strongly
			agree	agree	nor disagree	disagree	disagree
(i)	Differences	n	120	109	23	14	4
		%	44.44%	40.37%	8.52%	5.19%	1.48%
(ii)	Deserving	n	4	57	94	89	26
		%	1.48%	21.11%	34.81%	32.96%	9.63%
(iii)	Government	n	72	115	40	31	12
		%	26.67%	42.59%	14.81%	11.48%	4.44%

Note: The mode is highlighted in bold. The variables correspond to the answers to the questions listed in Table 25 (Appendix C), on a 5-point Likert scale from *Strongly agree* to *Strongly disagree*. They questions are: To what extent do you agree or disagree with the following statements? (**Differences**) Differences in income in the United Kingdom are too large; (**Deserving**) Most of the time, people with high incomes deserve their high incomes; (**Government**) It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.

think that the government has a responsibility to reduce income inequality (Clery et al., 2017; Curtice et al., 2019).

Table 23 reports regressions of the average WTP for reduced inequality across all inequality reductions under the CEO-MW format against these attitudes to income inequality taken separately, and then gradually together. There is a clear connection between attitudes to the size of income inequality (**Differences** factor) and WTP, with the latter increasing with agreement that income inequality is too large. Beyond the high *p*-value for the regression on attitudes to government intervention (**Government** factor; model (3)), an *F*-test does not reject the null hypothesis in the comparison between models (4) and (1), (F(4, 261) = 0.4199, p = 0.794), suggesting that it cannot reject the null hypothesis of no impact of the attitudes-to-government-intervention dummy in the presence of the attitudes-to-size-of-inequality dummy. Whilst adding interaction terms to model (4) is hampered by the sample size and the correlation between attitudes to differences in in-

	(1)	(2)	(3)	(4)	(5)
	Avg. WTP	Avg. WTP	Avg. WTP	Avg. WTP	Avg. WTP
	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE
<b>Differences</b> (baseline <i>Strongly agree</i> )					
Somewhat agree	$-4.690^{***}$			$-4.100^{**}$	$-3.982^{**}$
	(1.361)			(1.583)	(1.626)
Neither agree nor disagree	-6.660***			-5.672**	$-5.427^{**}$
	(1.911)			(2.215)	(2.417)
Somewhat disagree	$-7.520^{***}$			-6.623**	$-6.272^{**}$
	(2.188)			(2.747)	(2.803)
Strongly disagree	$-13.32^{***}$			$-14.24^{***}$	$-14.49^{***}$
	(1.644)			(3.599)	(3.683)
<b>Deserving</b> (baseline <i>Strongly agree</i> )					. ,
Somewhat agree		9.622			9.764
C C		(7.209)			(8.749)
Neither agree nor disagree		9.979			8.798
0		(7.185)			(8.845)
Somewhat disagree		11.56			8.823
C		(7.183)			(8.910)
Strongly disagree		15.14*			11.39
07 0		(7.398)			(9.187)
<b>Government</b> (baseline <i>Strongly agree</i> )		· · ·			· · · ·
Somewhat agree			$-2.832^{*}$	-1.036	-0.759
0			(1.601)	(1.781)	(1.819)
Neither agree nor disagree			-5.310***	-1.963	-1.806
0			(1.948)	(2.202)	(2.265)
Somewhat disagree			-6.186***	-2.233	-1.764
0			(1.957)	(2.480)	(2.615)
Strongly disagree			-5.038	1.100	1.249
0.90			(3.722)	(4.432)	(4.487)
Constant	15.17***	1.348	15.05***	15.75***	6.341
	(0.987)	(7.103)	(1.287)	(1.344)	(9.103)
Observations	270	270	270	270	270
R-squared	0.0843	0.0402	0.0430	0.0902	0.108
Prob > F	0.0000	0.0714	0.0138	0.0000	0.0000

Table 23: Average WTP for reduced inequality (CEO-MW format) and attitudes to income inequality

Robust standard errors in parentheses, + p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001*Note:* The (categorical) explanatory variables correspond to the answers to the questions in the "Attitudes towards inequality" part of Table 25, Appendix C. See also note to Table 24.

come and government intervention (see Table 24), an *F*-test against a model with attitude to government intervention, attitude to size of inequality and all interaction terms does not reject the null hypothesis of no impact of all terms involving attitude to government intervention (F(16, 249) = 1.5961, p = 0.07).

## C Screenshots and other details of experimental design

Figures 7-10 provide screenshots of the Instruction screens and the two types of comprehension question. Table 25 lists the end-of-experiment survey questions.

Differences						
Government	Strongly	Somewhat	Neither agree	Somewhat	Strongly	Total
	agree	agree	nor disagree	disagree	disagree	
Strongly agree	60	49	7	3	1	72
Somewhat	11	57	22	14	5	115
agree						
Neither agree	1	6	9	6	1	40
nor disagree						
Somewhat	0	3	1	8	2	31
disagree						
Strongly	0	0	1	0	3	12
disagree						
Total	120	109	23	14	4	270

Table 24: Distribution of respondents across attitudes to the size of income inequality and government intervention.

Please read these instructions carefully. After them, you will be asked several questions to check that you have understood them clearly.



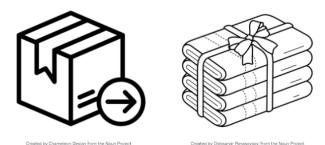
Created by Minh Do from the Noun Project

Imagine that you are in the following situation:

You are shopping online for new towels and have a budget of £50 for this purchase. After having browsed for different options, you have found suitable offers for a 6-piece 100% cotton white towel set from different popular retailing brands. The towel sets are comparable in every way except for the price and the inequality in income across employees of the company producing and selling the product.

This section of the survey will comprise of a series of questions. In each question, you will have the choice between two such comparable towel sets, with the price and the inequality level of each set as indicated. You will not be told the brand of each towel set.

Figure 7: First page of the Instructions



You have a chance of being randomly selected among all participants to receive a £50 budget and have one of your purchasing decisions played for real. So it is important that you answer all the questions honestly: i.e. choose the towel set, with price and inequality characteristics, which you really prefer buying.

More specifically, once everyone has completed the survey, the program will automatically select several participants and one purchase question for each of these participants. Each participant has an equal, better than 1 in a 100 chance of being selected. Each selected participant will be allocated the £50 budget, and the "purchase" in the selected question will be made according to the choice they stated during the survey. They will then be sent the purchased product and any change from £50.

#### Figure 8: Second page of the Instructions

In the questions below, you will be asked to choose between comparable towel sets. In each choice, the only difference in the towel sets will be:

The price and the income inequality level
The quality and the income inequality level
The price and the quality
Select the true statement:
Each participant has an equal chance of receiving a towel set and change from £50, and which set and change he or she gets depends on the choices he or she makes.
Every participant will receive the same towel set and change from $\pm 50$ , irrespective of their choices.
No survey participant will receive anything on the basis of their choices.

Figure 9: General comprehension check (immediately after the instructions)

In the following 3 series of questions, the inequality in income across employees of the company producing and selling each towel set will be reported in the form of the **CEO-to-median pay ratio**.

The CEO-to-median pay ratio of a company is how many times more the company's Chief Executive Officer (CEO) earns compared to its average worker. So the CEO-to-median pay ratio is 500 when the CEO earns 500 times more than the average worker.

The CEO is the top management position in the company. Here, the pay of the average worker is calculated as the median pay of the company's employees (which means that 50% of employees at the company earn more than the average worker pay and 50% of employees earn less).

To verify that these indications were clear, consider the following companies, with the income inequality across employees indicated for each. Please rank them, using drag and drop, from highest inequality (at the top) to lowest inequality (at the bottom).



2 The CEO earns 750 times more than the average worker.

3 The CEO earns 150 times more than the average worker.

Figure 10: Inequality reporting format comprehension check (this example for CEO-MW format)

Topic / name	Question	Response format	
Inequality reporting			
Informativity	Of the two reporting formats, which do you find the most informative?	Format 1 / 2 / Same	
Understandability	Of the two reporting formats, which is the easiest to understand?	Format 1 / 2 / Same	
Preference	If inequality was to be reported in any of the two reporting formats, which would you prefer?	Format 1 / 2 / In- different	
Future use	If information about the level of inequality of com- panies involved in the production of goods were available, would you use it when shopping?	5-point Likert	
Attitudes towards ine	quality		
	To what extent do you agree or disagree with the fo	ollowing statements?	
Differences	Differences in income in the United Kingdom are too large.	5-point Likert	
Government	It is the responsibility of the government to re- duce the differences in income between people with high incomes and those with low incomes.	5-point Likert	
Desert	Most of the time, people with high incomes de- serve their high incomes.	5-point Likert	
Socio-demographic			
Education	What is the highest level of education you have completed or the highest degree you have received?	8-level Mult. Ch.	
Employment	What is your current employment status?	8-entry Mult. Ch.	
Political party	Which of these political parties do you consider	3 main parties /	
	yourself closest to?	Other (to specify) / None	
Political leaning	On economic policy matters, where do you see yourself on the left/right spectrum?	Left / Centre / Right	
Income	Would you say the total income, before taxes and deductions, of all family members living in your household in 2019 was?	Two chained questions; in- come in $\pounds 10\ 000$ brackets below $\pounds 50\ 000$ , in $\pounds 25$ 000 brackets above.	

Table 25: End-of-study survey questions